HITACHI
SERVICE MANUAL

YK | No.0174E

CT2079B

R/C:CLU-340 | NTSC | G7XU Chassis

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CAUTION: Before servicing this chassis, it is important that the service technician read the "Safety Precaution" and "Product Safety Notices" in this Service Manual.

TECHNICAL SPECIFICATIONS

ANTENNA INPUT IMPEDANCE 300Ω, 75Ω
CHANNEL COVERAGE
- VHF LOW ..... 4 + 2 ~ 6
- VHF HIGH ..... 7 ~ 13
- UHF ..... 14 ~ 69
- CATV MID BAND ..... A-5 ~ A-1
  A ~ I
- SUPER BAND ..... J ~ W
- HYPER BAND ..... W + 1 ~ W + 28
- ULTRA BAND .. W + 29 ~ W + 84

CHANNEL INDICATOR ..... DIGITAL/ON SCREEN
INTERMEDIATE FREQUENCY
- Picture I-F Carrier ..... 45.75 MHz
- Sound I-F Carrier ..... 41.25 MHz
- Sound I-F ..... 4.50 MHz

POWER INPUT AC120V 60Hz
POWER RATING 115W
CONVERGENCE ..... Self convergence
FOCUS ..... Electrostatic
PICTURE TUBE A51ACG25X
A51JML11X
SOUND OUTPUT ..... 3W x 2
DIMENSIONS
- W ..... 636 mm
- H ..... 472 mm
- D ..... 494 mm

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

SOLID STATE COLOR TELEVISION

October 1987 **YOKOHAMA WORKS**

SAFETY PRECAUTIONS

NOTICE: Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis or picture tube.

WARNING: Since the chassis of this receiver is connected to one side of AC power supply during operation, whenever the receiver is plugged in, service should not be attempted by anyone unfamiliar with the precautions necessary when working on this type of receiver.

The following precautions should be observed:

1. Do not install, remove, or handle the picture tube in any manner unless shatterproof goggles are worn. People not so equipped should be kept away while picture tubes are handled. Keep picture tube away from the body while handling.
2. When service is required, an isolation transformer should be inserted between power line and the receiver before any service is performed on a "HOT" chassis receiver.
3. When replacing a chassis in the receiver, all the protective devices must be put back in place, such as barriers, non-metallic knobs, adjustment and compartment covershields, isolation resistor-capacitor, etc.
4. When service is required, observe the original lead dress. Extra precaution should be taken to assure correct lead dress in the high voltage circuitry area.
5. Always use the manufacturer's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacture's. Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
6. Before returning a serviced receiver to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the receiver by the manufacturer has become defective, or inadvertently defeated during servicing.

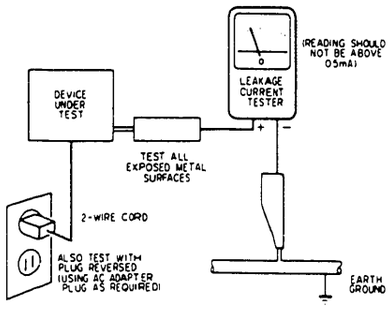
Therefore, the following checks should be performed for the continued protection of the customer and service technician.

Leakage Current Cold Check

With the AC plug removed from the 120V AC 60Hz source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (antennas, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistor reading of 0.3MΩ and a maximum resistor reading of 5MΩ. Any resistor value below or above this range indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

Leakage Current Hot Check

Plug the AC line cord directly into a 120V AC 60Hz outlet (do not use an isolation transformer for this check). Turn the AC power switch on. Using a "leakage Current Tester (Simpson Model 229 equivalent)", measure for current from all exposed metal parts of the cabinet (antennas, screwheads, metal overlays, control shaft, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 0.5mA.


(READING SHOULD NOT BE ABOVE 0.5mA)
LEAKAGE CURRENT TESTER
DEVICE UNDER TEST
TEST ALL EXPOSED METAL SURFACES
2-WIRE CORD
ALSO TEST WITH PLUG REVERSED (USING AC ADAPTER PLUG AS REQUIRED)
EARTH GROUND

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE RECEIVER TO THE CUSTOMER.

High Voltage

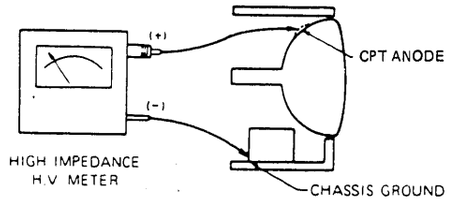
This receiver is provided with a hold down circuit for clearly indicating that voltage has increased in excess of a predetermined value. Comply with all notes described in this Service Manual regarding this hold down circuit when servicing, so that this hold down circuit may correctly be operated.

Serviceman warning

With minimum Black Level and Picture, operating high voltage in this receiver is lower than 31.0KV. In case any component having influence on high voltage is replaced, confirm that high voltage with minimum Black Level and Picture is lower than 31.0KV.

To measure H.V. use a high impedance H.V. meter. Connect (–) to chassis earth and (+) to the CRT anode button. (See the following connection diagram).

NOTE: Turn power switch off without fail before the connection with Anode button is made.



X-radiation

TUBE: The primary source of X radiation in this receiver is the picture tube. The tube utilized for the above mentioned function in this chassis is specially constructed to limit X radiation emissions.

For continued X radiation protection, the replacement tube must be the same type as the original, HITACHI approved type.

When trouble shooting and making test measurments in a receiver with a problem of excessive high voltage, avoid being unnecessarily close to the picture tube and the high voltage component.

Do not operate the chassis longer than is necessary to locate the cause excessive voltage.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in HITACHI television receiver have special safety related characteristics. These are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the HITACHI recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, X-radiation, or other hazards.

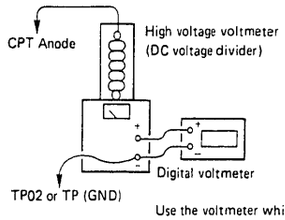
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current HITACHI Service Manual. A subscription to, or additional copies of, HITACHI Service Manual may be obtained at a nominal charge from HITACHI SALES CORPORATION.

TECHNICAL CAUTIONS

High voltage limiter circuit operation check

1. Connect the high voltage voltmeter between the CPT anode terminal (anode cap) and ground (TP02 or TP (GND)) as shown in Fig. 1.
2. Set the AC input voltage to 132±3V.
3. Receive the broadcast signal and set the picture VR to maximum and the black level VR to the center. Adjust the screen VR and sub brightness VR so that beam current is 1.25±0.1mA. (The voltage at ABL terminal of FBT – between both ends of C736 – should be 10V or less at this time.)
4. Check that the constant high voltage is 25.5±2.0kV at this time.
5. Set the AC input voltage to 100±5V and then short-circuit both ends of R907.
6. Leave the settings of the picture, black level and screen VRs as in item (3) and gradually increase the AC input voltage. Check that the picture disappears when the high voltage is less than 32.0kV.
7. Turn the switch of the set off immediately after checking that the picture disappears.
8. Remove the adjustment jig and high voltage voltmeter.

When the high voltage voltmeter is connected/disconnected to/from the anode cap, be sure to turn the switch of the set off. Since a high voltage may remain at the CPT anode, connect/disconnect after the residual high voltage is discharged to the chassis.



Use the voltmeter which can indicate up to the first desimal point, with an input inpedance of 1 MΩ or more.

Fig. 1

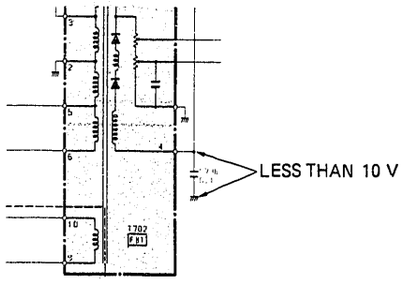
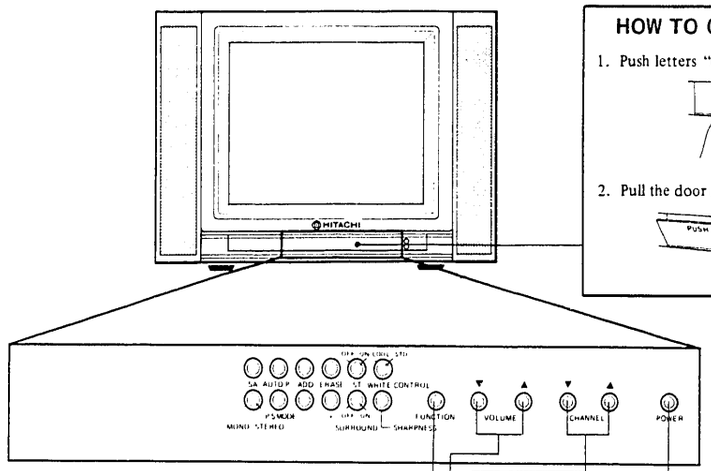


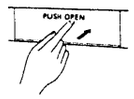
Fig. 2

LOCATION OF CONTROLS [Front]

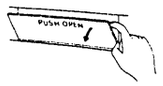


HOW TO OPEN THE DOOR

1. Push letters "PUSH-OPEN" on the door.



2. Pull the door toward the front to open it.



FUNCTION SELECTION – (FUNCTION BUTTON)

Every time you press the FUNCTION BUTTON, the set repeats TV mode and FUNCTION mode.
To watch TV, set to the TV mode. At this time the channel number is displayed at the upper right of the screen. To enjoy VCR, set to the FUNCTION mode.

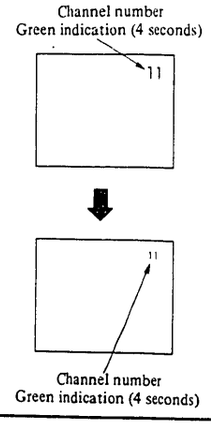
- When a power failure occurs or the power cord is unplugged, the TV set returns to TV mode.

TURNING THE SET ON – (POWER BUTTON)

Push the POWER BUTTON to turn the set ON.
(To turn the set OFF, push the POWER BUTTON again.)

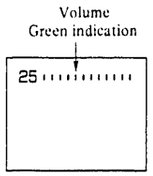
CHANNEL SELECTION – (CHANNEL BUTTON)

Channel selection may be performed by pressing either the CHANNEL BUTTON UP (▲) or DOWN (▼).
When pressing the right side (▲ : UP) of CHANNEL BUTTON, the next higher channel is selected. And when pressing the left side (▼ : DOWN) of the CHANNEL BUTTON, the next lower channel is selected.
The No. of the channel to which it is tuned is displayed at the upper right side of the screen.
The channel No. selected is displayed for approx. 8 seconds after changing channels and disappears automatically. (The channel No. is indicated for 4 sec. in large letters, then indicated for 4 sec. in small letters, and then disappears.) (When you turn the set ON, the channel No. is displayed on the screen for approx. 15 seconds.)

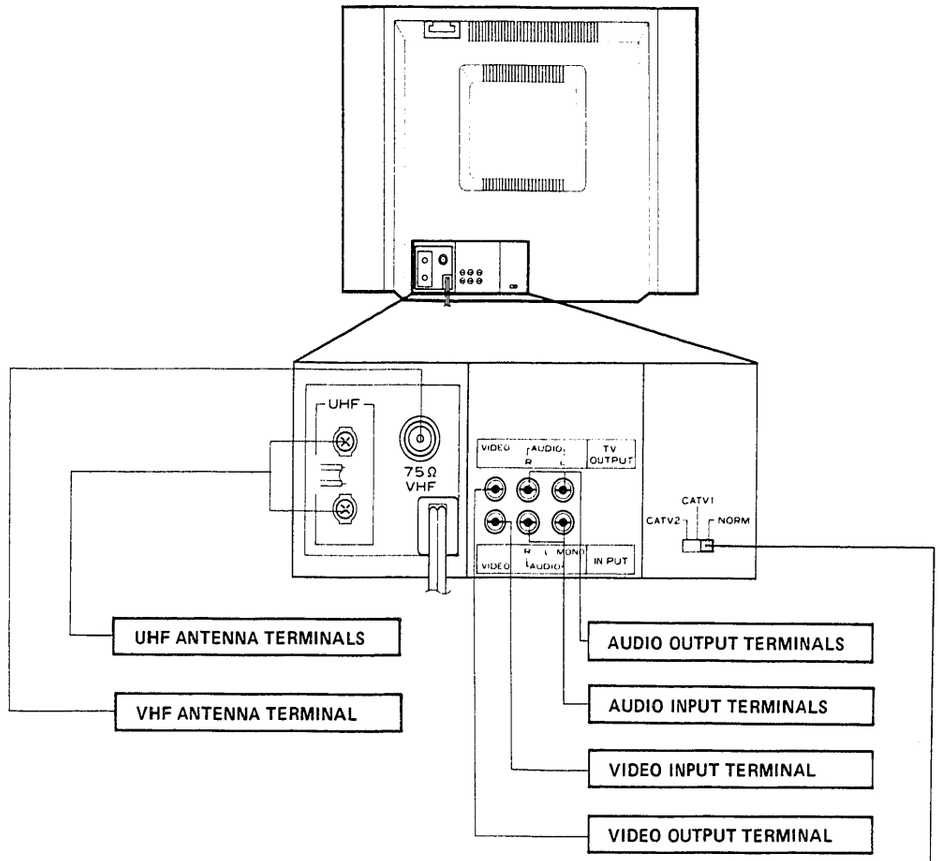


VOLUME CONTROL – (VOLUME BUTTON)

Push the right side (▲ : UP) of the VOLUME BUTTON to make sound louder, and the left side (▼ : DOWN) of the VOLUME BUTTON to make sound softer.
Variation of the volume is displayed at the upper part of the screen with numerals 0 ~ 63 and color bar.



LOCATION OF TERMINALS [Rear]



BAND SELECTION – (BAND SELECTOR SWITCH)

The BAND SELECTOR SWITCH is installed at the back of the set. Your TV can receive 12 VHF channels, 56 UHF channels and 125 CATV channels. Choose the required reception band by sliding the BAND SELECTOR SWITCH shown in Fig. 1.

- When shipped from the factory, this switch is set to the "NORM" position.

RECEPTION BAND	
NORM	CATV1 or CATV2
VHF 2 ~ 13 ch UHF 14 ~ 69 ch	VHF 2 ~ 13 ch Mid band A ~ I, A-5 ~ A-1 Super band J ~ W Hyper band W+1 ~ W+28 Ultra band W+29 ~ W+84

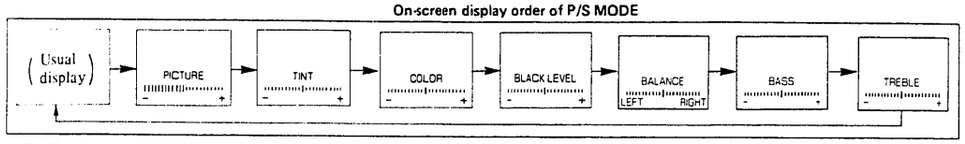
Fig. 1

TO OBTAIN THE BEST PICTURE AND SOUND

To control P. MODE (PICTURE, TINT, COLOR, BLACK LEVEL) and S. MODE (BALANCE, BASS, TREBLE), follow the instructions below. They are set to normal position, when shipped from the factory.

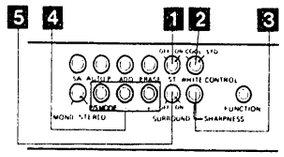
P/S MODE BUTTON
Choose the required control, as seven kinds of control will be shown in the following order every time you press the P/S MODE BUTTON.

On-screen display order of P/S MODE



+ BUTTON / – BUTTON
Use the + and – BUTTON for control.
When you press the + BUTTON, the cursor moves to the right, and when you press the – BUTTON, the cursor moves to the left, as the state of control is changed (as for PICTURE, color bar is increased or decreased).
For best results, refer to the following OPERATION.

OPERATION



1	SIGNAL TRACKER (ST)	ST is to automatically control variation of color tone between channels. To engage ST, once turn the ST switch "OFF", then set the TINT control and COLOR control (mentioned below) to the best position, and then turn the ST switch "ON". This is the best way to provide the best pictures. But you can adjust the TINT and the COLOR to your preference even when the ST continues "ON".
2	WHITE CONTROL	You can adjust the white balance (hue) of the picture to your own color preference. When shipped from the factory, this is set to "STD". If you prefer bluish screen, set to "COOL".
3	SHARPNESS	Turn clockwise (right) to get a sharper and turn counterclockwise (left) to get a softer picture.
4	P. MODE	**PICTURE** The PICTURE control is used to adjust contrast, the black level and the color all at once. When the + button is pressed (the indicator moves right), the black level is increased, contrast becomes greater and the color becomes deeper.
		TINT When the – button is pressed (the cursor moves left), fleshtones will be tinted purple, and when the + button is pressed (the cursor moves right), they will be green. With the TINT control set at the point where fleshtones appear most real and natural, all other colors will appear normal.
		COLOR The COLOR control sets the intensity of colors. Set this control to where the colors appear normal in intensity and brilliance.
		BLACK LEVEL Set this control until the portions of the picture you know to be black appear black.
	S. MODE	**BALANCE** Permit adjustment of the balance of the sound from the left and right speakers.
		BASS Press the + Button (the cursor moves right) to get low frequency sound and press the – Button to cut low frequency sound.
		TREBLE Press the + Button (the cursor moves right) to get high frequency sound and press the – Button to cut high frequency sound.
5	SURROUND	When stereo sound is reproduced by your TV, VCR or Video Disc Player, turn on the SURROUND switch, and they will have surround effects.

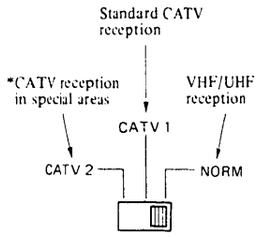
Notes:
1. When the sound is disturbed by noises at the time of stereo broadcasting, you may hear the noises being emphasized. In this case, please set to the lower sound using BASS/TREBLE controls, or turn OFF the SURROUND switch.
2. You cannot get the surround effects, if STEREO/MONO switch is set to MONO even when stereo broadcasted, or if monaural broadcast is received.
3. Use the VR driver packed together with TV set when adjusting the ST, WHITE CONTROL, STEREO/MONO, and SURROUND.

CABLE ANTENNA (CATV) OPERATION

Your TV can receive Cable Antenna (CATV) system.
(See the table "RECEPTION BAND".)
To receive CATV channels, please operate as follows.

STEP 1 **CATV ANTENNA CONNECTION**
Connect your CATV cable to the antenna terminal board.

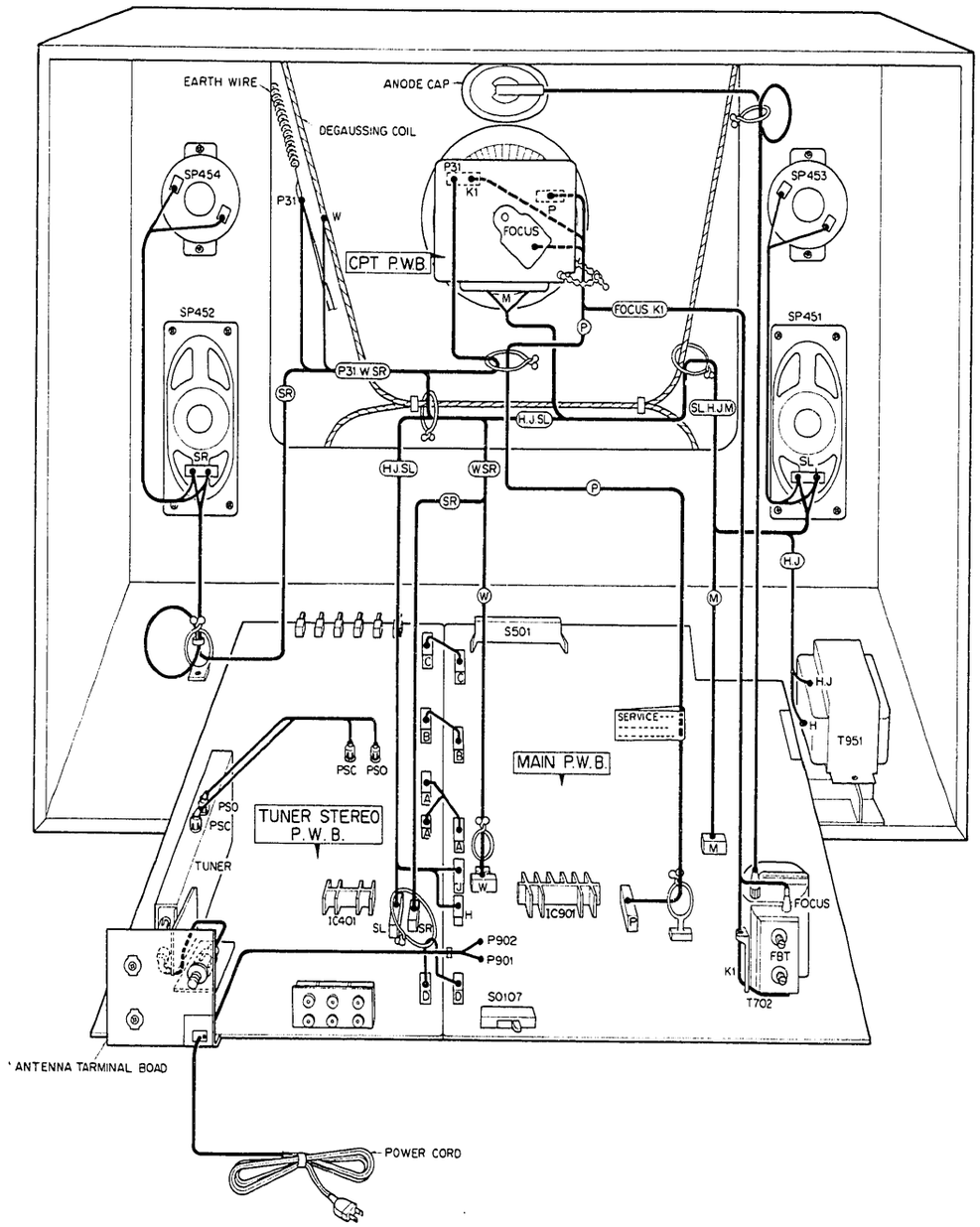
STEP 2 **BAND SELECTION – (BAND SELECTOR SWITCH)**
Set the BAND SELECTOR SWITCH on the back of the set to CATV 1 from normal CATV operation.
*If the special channel frequencies that is known as an H.R.C. (Harmonically Related Carrier) system are used with your cable system, set the BAND SELECTOR SWITCH to CATV 2.



STEP 3 **CHANNEL SELECTION – (CHANNEL BUTTON)**
CATV channel selection can be done with the CHANNEL BUTTON UP (▲) or DOWN (▼) as with VHF/UHF channels. When receiving CATV 2 ~ 13 channels, 2 ~ 13 is indicated on the screen. When receiving Mid band channels, A ~ 1, 14 ~ 22 is indicated, and when receiving Super Band channels J ~ W, 23 ~ 36 is indicated. And when receiving Hyper band channels W+1 ~ W+28, 37 ~ 64 is indicated, when receiving Mid band A-5 ~ A-1, 95 ~ 99 is indicated. And when receiving Ultra band channels W+29 ~ W+58, W+59 ~ W+84, 65 ~ 94 and 100 ~ 125 is indicated.

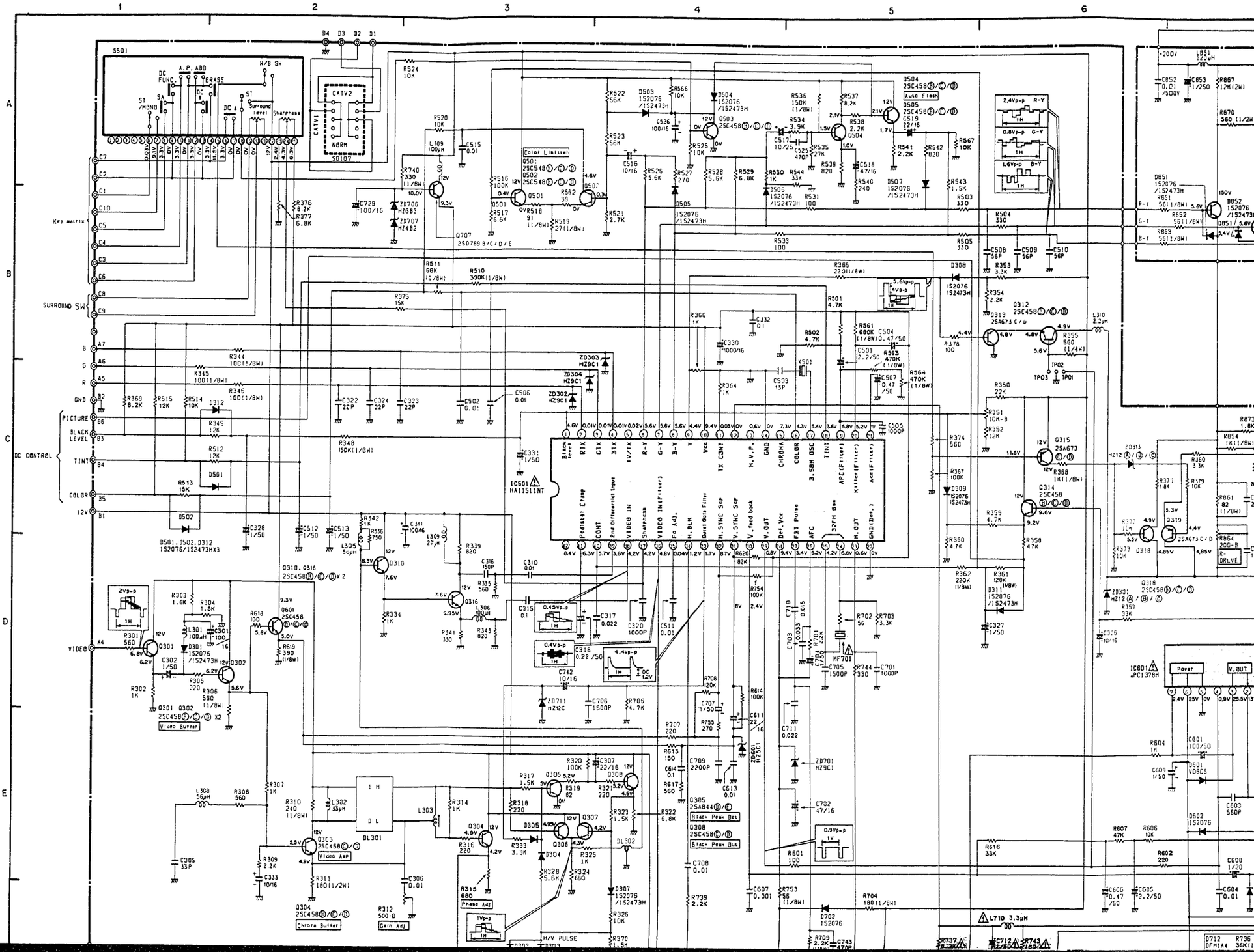
Notes:
1. In some areas there is a special channel (4*) between channel 4 and channel 5; this can be received when the BAND SELECTOR SWITCH is set to "CATV 2" and channel No. 1 is selected.
2. If the reception of certain CATV channel is poor or not possible in the CATV 1 position, set the band selector switch to CATV 2.

WIRING DIAGRAM



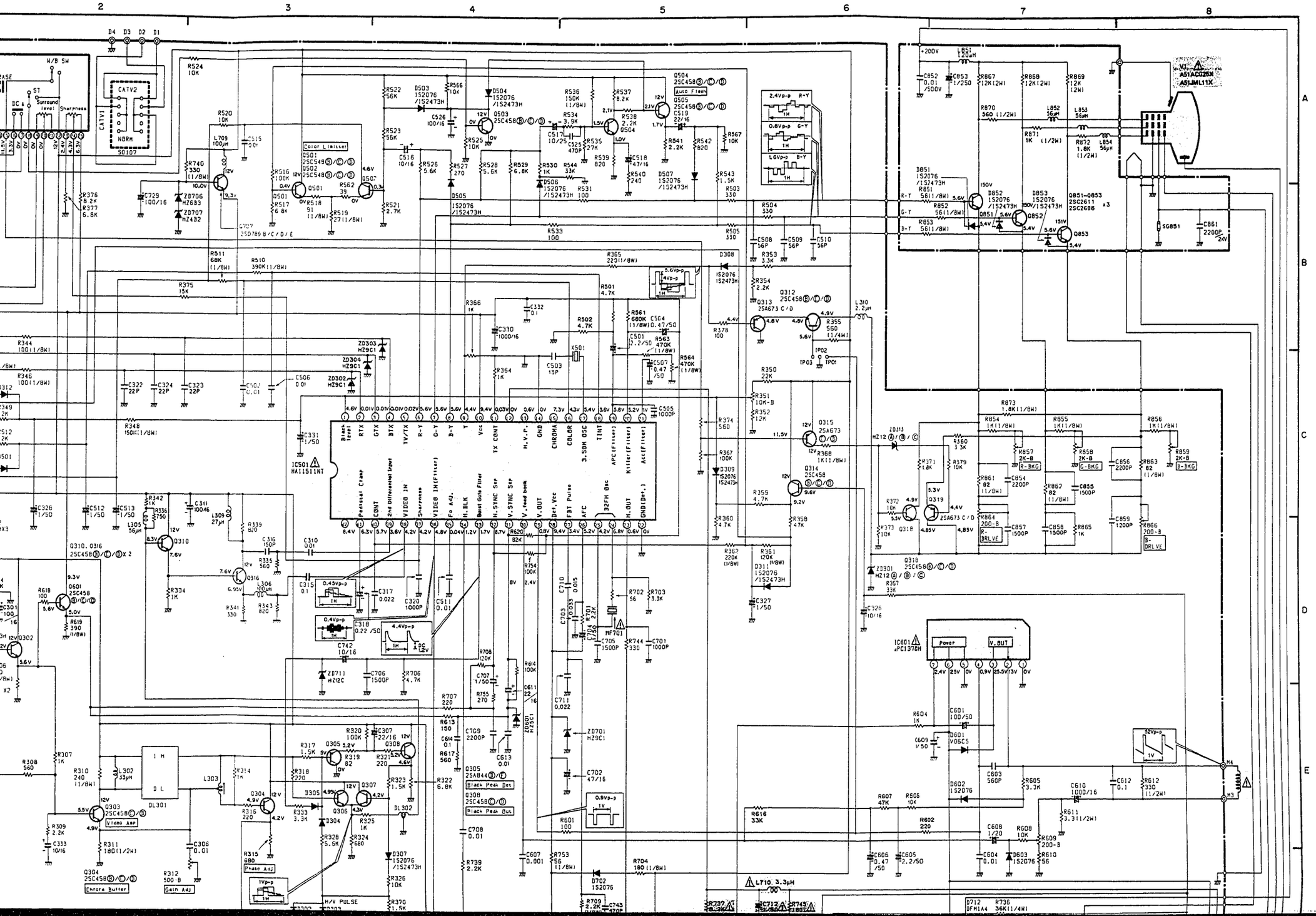
BASIC CIRCUIT DIAGRAM
MAIN CIRCUIT DIAGRAM

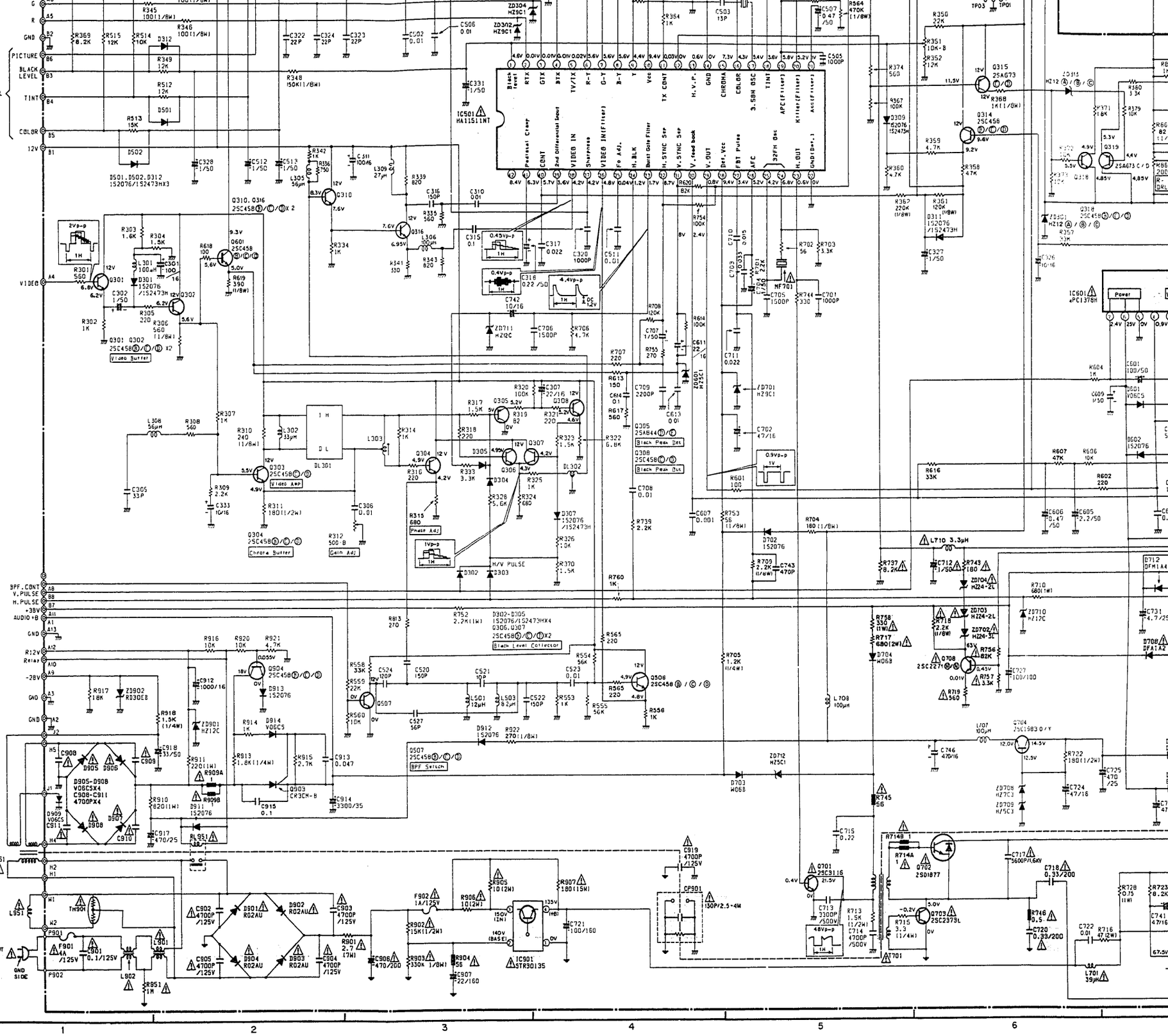
PRODUCT SAFETY NOTE:
safety. Before replacing any
Manual. Don't degrade the saf



BASIC CIRCUIT DIAGRAM
MAIN CIRCUIT DIAGRAM

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver though improper servicing.




DC CONTROL
PICTURE
BLACK LEVEL
TINT
COLOR
12V
VIDEO
IC501 HA11511NT
Black level
RTX
GTX
BTX
TV/TX
R-Y
G-Y
B-Y
Y
Vcc
TX CONT
H.V.P.
GND
CHROMA
COLOR
3.58M OSC
TINT
APC(Filter)
Killer(Filter)
ACC(Filter)
Pedestal Clamp
CONT
2nd Differential Input
VIDEO IN
Sharpness
VIDEO IN(Filter)
Fo Adj.
H.BLK
Burst Gate Filter
H.SYNC Sep
V.SYNC Sep
V.feed back
V.OUT
Def. Vcc
FBT Pulse
AFC
32FH Osc
H.OUT
GND(Def.)
D501.D502.D312 1S2076/1S2473HX3
Q310.Q316 2SC458Ⓑ/Ⓒ/ⓓX 2
Video Buffer
Q301.Q302 2SC458Ⓑ/Ⓒ/ⓓ X2
Q304 2SC458Ⓑ/Ⓒ/ⓓ
Chroma Buffer
Video AMP
Gain Adj
Phase Adj
H/V PULSE
D302-D305 1S2076/1S2473HX4
Q306.Q307 2SC458Ⓑ/Ⓒ/ⓓX2
Black Level Collector
Q507 2SC458Ⓑ/Ⓒ/ⓓ
BPF Switch
Q305 2SA844Ⓒ/ⓓ
Black Peak Det
Q308 2SC458Ⓒ/ⓓ
Black Peak Out
IC601 μPC1378H
Power
Q315 2SA673
Q314 2SC458
Q319 2SA673 C/D
Q318 2SC458Ⓑ/Ⓒ/ⓓ
Q701 2SC3116
Q702 2SD1877
Q703 2SC2379L
Q704 2SC1983 O/Y
Q708 2SC2271Ⓞ/Ⓨ
Q509 2SC458Ⓑ/Ⓒ/ⓓ
IC901 STR30135
BPF.CONT
V.PULSE
H.PULSE
+38V
AUDIO+B
R12V
Relay
-28V
AC INPUT 120V
GND SIDE
T951
TH901
P901
P902
L951
L952
L901
L902
F901 4A /125V
RL951
D901 RO2AU
D902 RO2AU
D903 RO2AU
D904 RO2AU
D905-D908 V06CSX4 C908-C911 4700PX4
D909 V06CS
D907
D908
D910 1S2076
D911 1S2076
D912 1S2076
D913 1S2076
D914 V06C5
D055V
ZD901 HZ12C
ZD902 RD30EB
ZD304 HZ9C1
ZD302 HZ9C1
ZD711 HZ12C
ZD701 HZ9C1
ZD601 HZ5C1
ZD712 HZ5C1
ZD703 HZ24-2L
ZD702 HZ24-2L
ZD704 HZ24-2L
ZD710 HZ12C
ZD708 HZ7C3
ZD709 HZ5C3
D309 1S2076/1S2473H
D311 1S2076/1S2473H
D312 1S2076/1S2473HX3
D704 HD68
D703 HD68
D702 1S2076
D307 1S2076/1S2473H
D601 V06C5
D602 1S2076
CP901 150P/2.5~4M
DL301
DL302
L303
L305 56μH
L306 100μH
L307 100μH
L308 56μH
L309 27μH
L501 12μH
L503 82μH
L708 100μH
L710 3.3μH
L701 39μH
TP01
TP03
MF701
R303 1.6K
R304 1.5K
R305 220
R306 560 (1/8W)
R307 1K
R308 560
R309 2.2K
R310 240 (1/8W)
R311 180Ω(2W)
R312 500Ω-B
R313 15K
R314 1K
R315 680
R316 220
R317 1.5K
R318 220
R319 82
R320 100K
R321 220
R322 6.8K
R323 1.5K
R324 680
R325 1K
R326 1.0K
R327 5.6K
R328 5.6K
R329 3.3K
R330 330K 1/8W
R331 15K(1/2W)
R332 180Ω(1/2W)
R333 3.3K
R334 1K
R335 560
R336 150
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R717 680Ω(2W)
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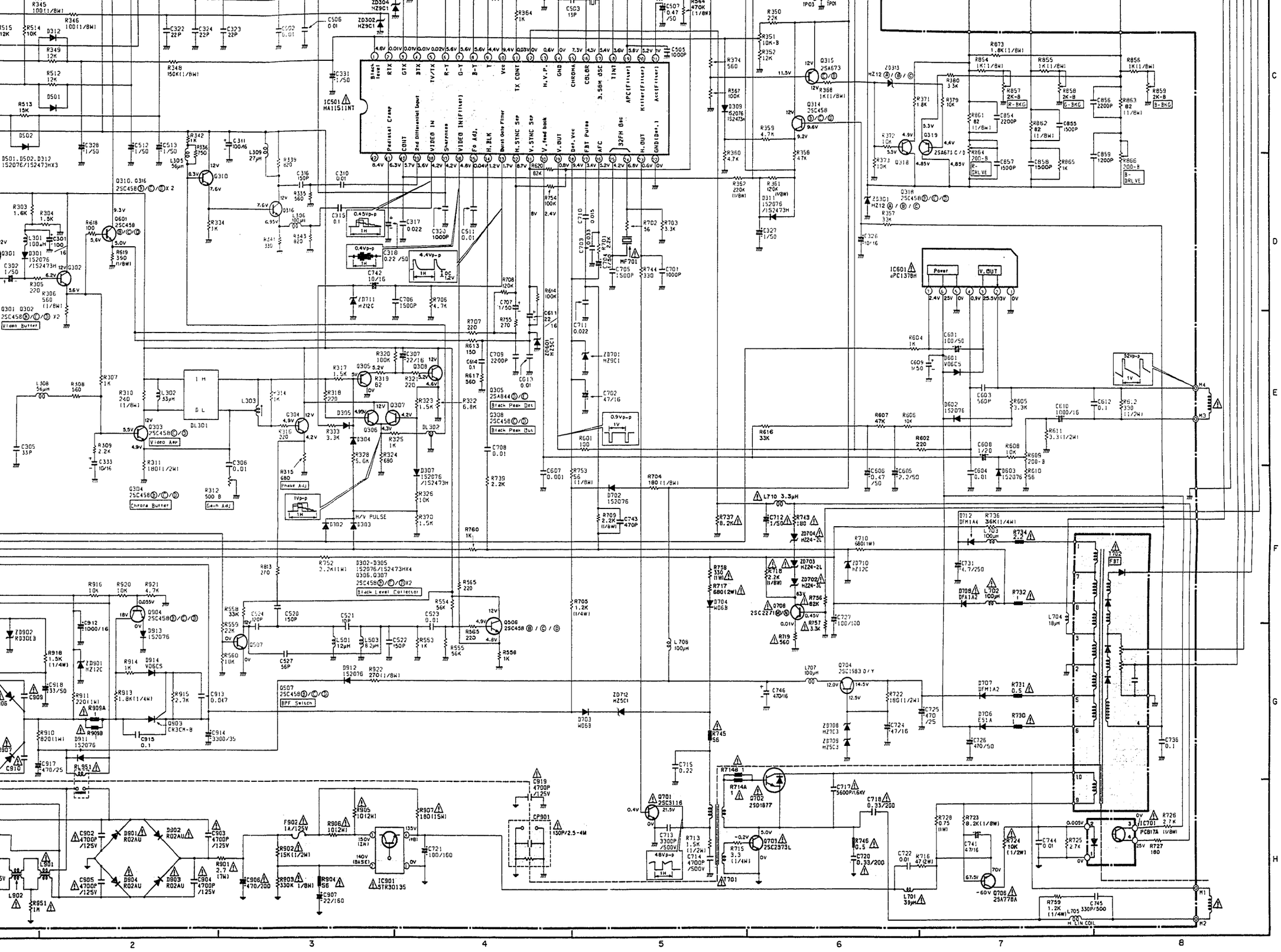
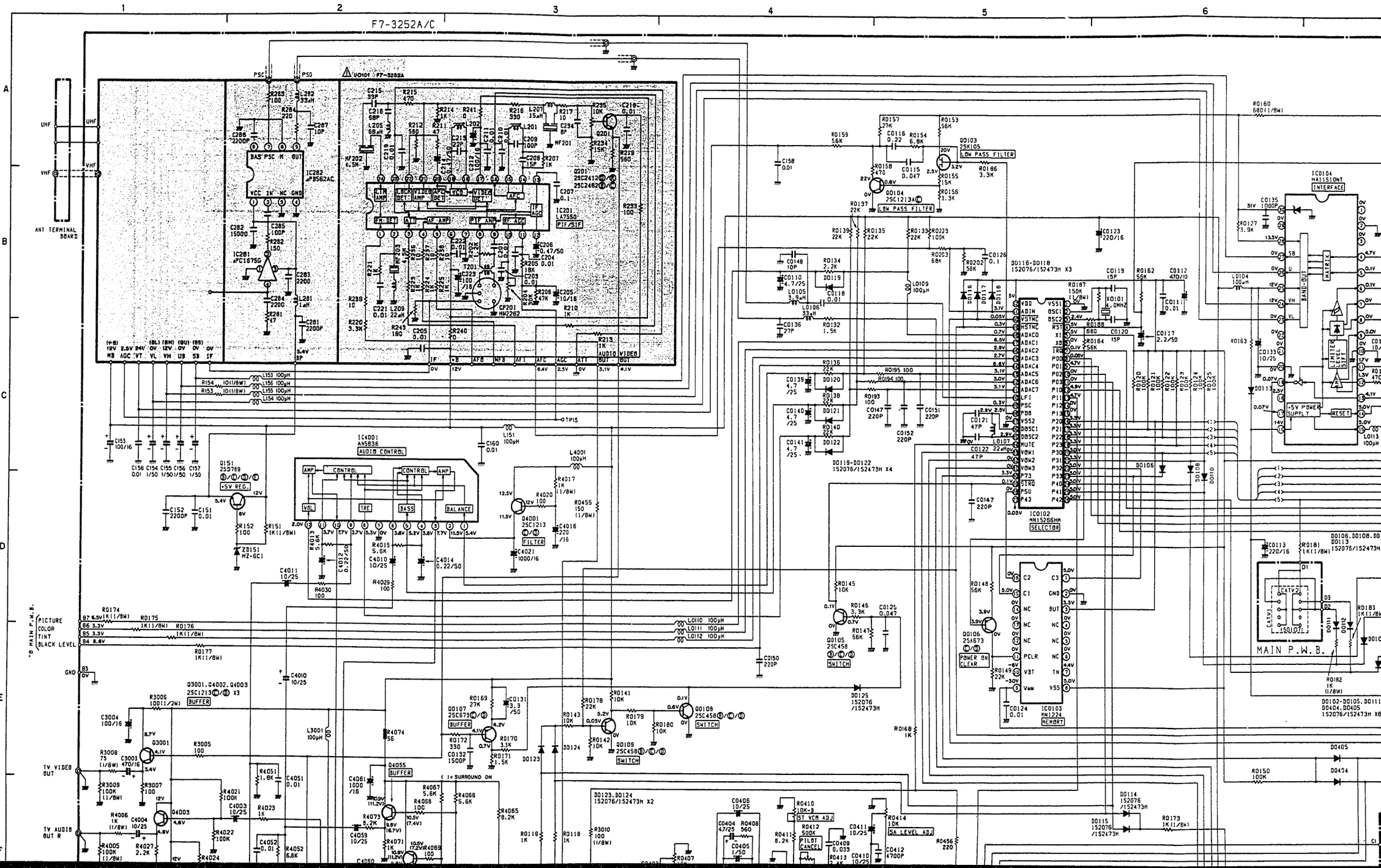
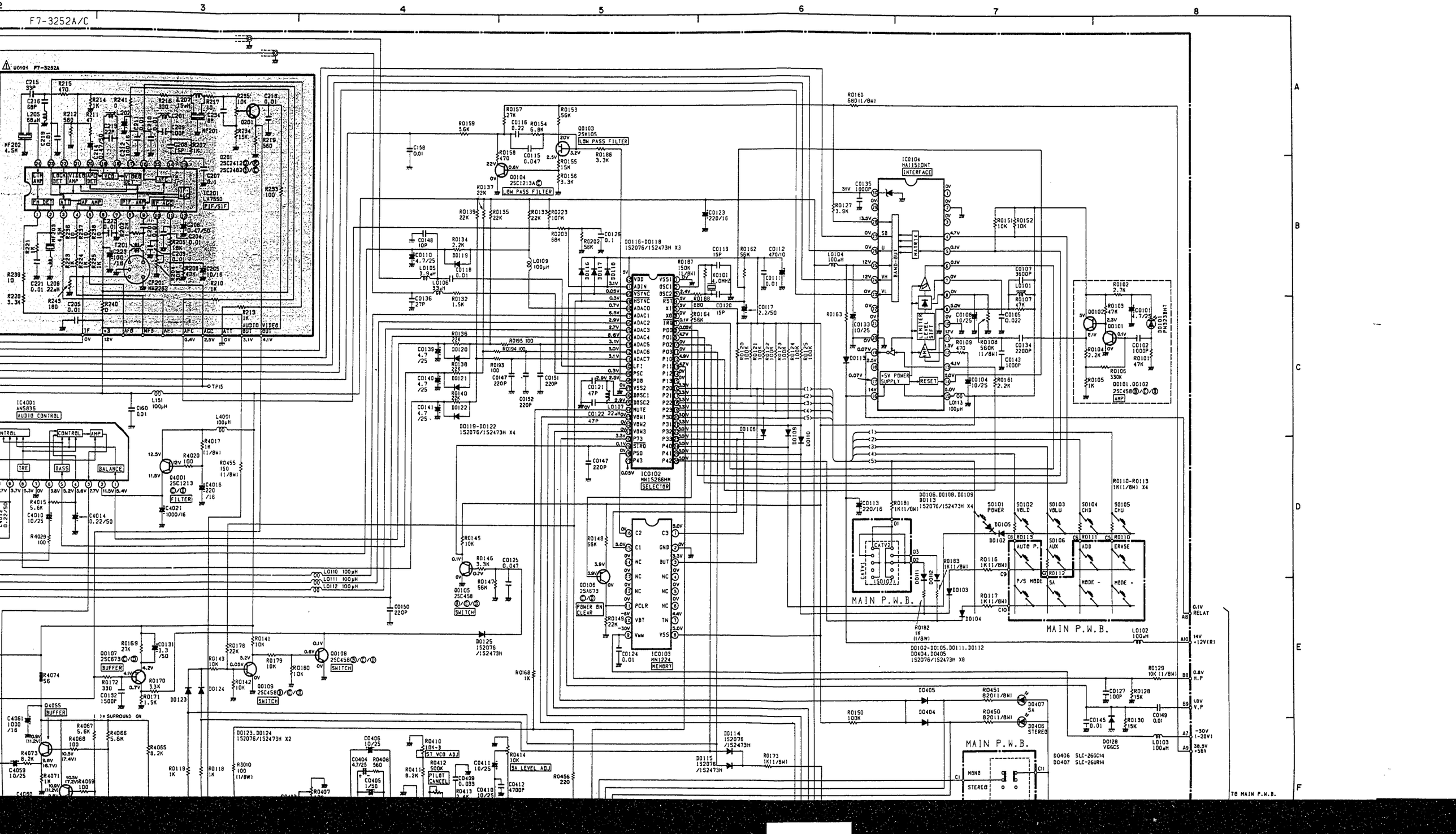

IC501 HA11511NT
Black level
R-Y
G-Y
B-Y
TX CONT
H.V.P.
GND
CHROMA
COLOR
3.58M OSC
TINT
APC(Filter)
Killer(Filter)
Acc(Filter)
Pedestal Clamp
COUT
2nd Differential Input
VIDEO IN
Sharpness
VIDEO IN(Filter)
Fo Adj.
H.BLK
Burst Gate Filter
H.SYNC Sep
V.SYNC Sep
V.feed back
V.OUT
Def.Vcc
FBT Pulse
AFC
32FH Osc
H.OUT
GND(Def.)
IC601 μPC1378H
Power
V.OUT
Video Buffer
Video Amp
Chroma Buffer
Gain Adj
Phase Adj
H/V PULSE
Black Peak Det
Black Peak Out
Black Level Collector
BPF Switch
IC901 STR30135
H.LIN COIL
V.LIN COIL
PCB17A
FBT
1 H
D L
DL301
DL302
L303
L702
L704
L705
L706
L708
L710 3.3μH
MF701
CP901
RL951
F902 1A/125V
D801 RO2AU
D802 RO2AU
D803 RO2AU
D804 RO2AU
D901 RD30EB
D902 RD30EB
D903 RD30EB
D904 RD30EB
D912 152076
D913 152076
D914 V06CS
D915 CK3CM-B
D911 152076
D307 152076 /152473H
D309 152076 /152473H
D311 152076 /152473H
D501 D502 D312 152076/152473HX3
D303-D305 152076/152473HX4
D306 Q307 2SC458Ⓑ/Ⓒ/ⒹX2
Q310 Q316 2SC458Ⓚ/Ⓒ/ⒹX 2
Q601 2SC458Ⓑ/Ⓒ/Ⓓ
Q301 Q302 2SC458Ⓚ/Ⓒ/ⒹX2
Q303 2SC458Ⓒ/Ⓓ
Q304 2SC458Ⓒ/Ⓓ/Ⓔ
Q305 2SA844Ⓓ/Ⓔ
Q308 2SC458Ⓒ/Ⓓ
Q315 2SA673
Q314 2SC458
Q319 2SA673 C/D
Q318 2SC458Ⓑ/Ⓒ/Ⓓ
Q701 2SC5116
Q702 2SD1877
Q703 2SC2973L
Q704 2SC1583 O/Y
Q705 2SA778A
Q708 2SC2271Ⓞ/Ⓨ
Q506 2SC458Ⓑ/Ⓒ/Ⓓ
Q507 2SC458Ⓑ/Ⓒ/Ⓓ
Q903 CK3CM-B
ZD302 HZ9C1
ZD304 HZ9C1
ZD701 HZ9C1
ZD702 HZ24-3L
ZD703 HZ24-2L
ZD704 HZ24-2L
ZD710 HZ12C
ZD711 HZ12C
ZD712 HZ5C1
ZD901 HZ12C
ZD902 RD30EB
ZD313 HZ12 Ⓐ/Ⓑ/Ⓒ
ZD314 HZ12 Ⓐ/Ⓑ/Ⓒ
ZD708 HZ9C3
ZD709 HZ9C3
D708 DFM1A2
D707 DFM1A2
D706 ES1A
D712 DFM1A4
D602 152076
D603 152076
D604 152076
D309 152076
D310 152076
D702 152076
D308 DFM1A4
D601 V06CS
R-BKG
G-BKG
B-BKG
R-DRIVE
B-DRIVE
Video Out
Sync Out
Blanking Out
R-Y Out
B-Y Out
G-Y Out
Audio Out
Tuning Out
Band Out
AFT Out
Power
Vcc
GND
Tuning
Band
AFT
Video
Sync
Blanking
R-Y
B-Y
G-Y
Audio

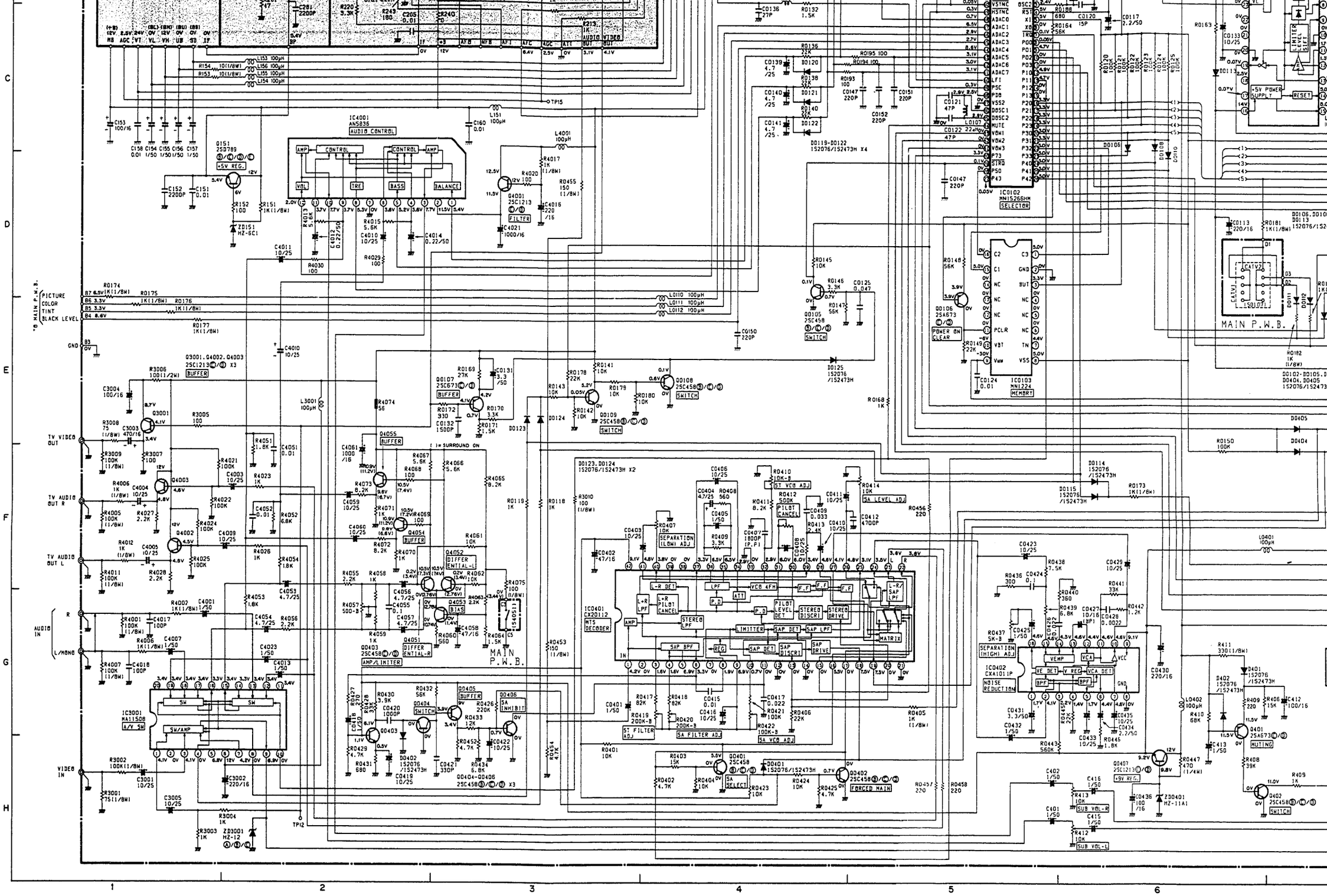
TUNER STEREO CIRCUIT DIAGRAM

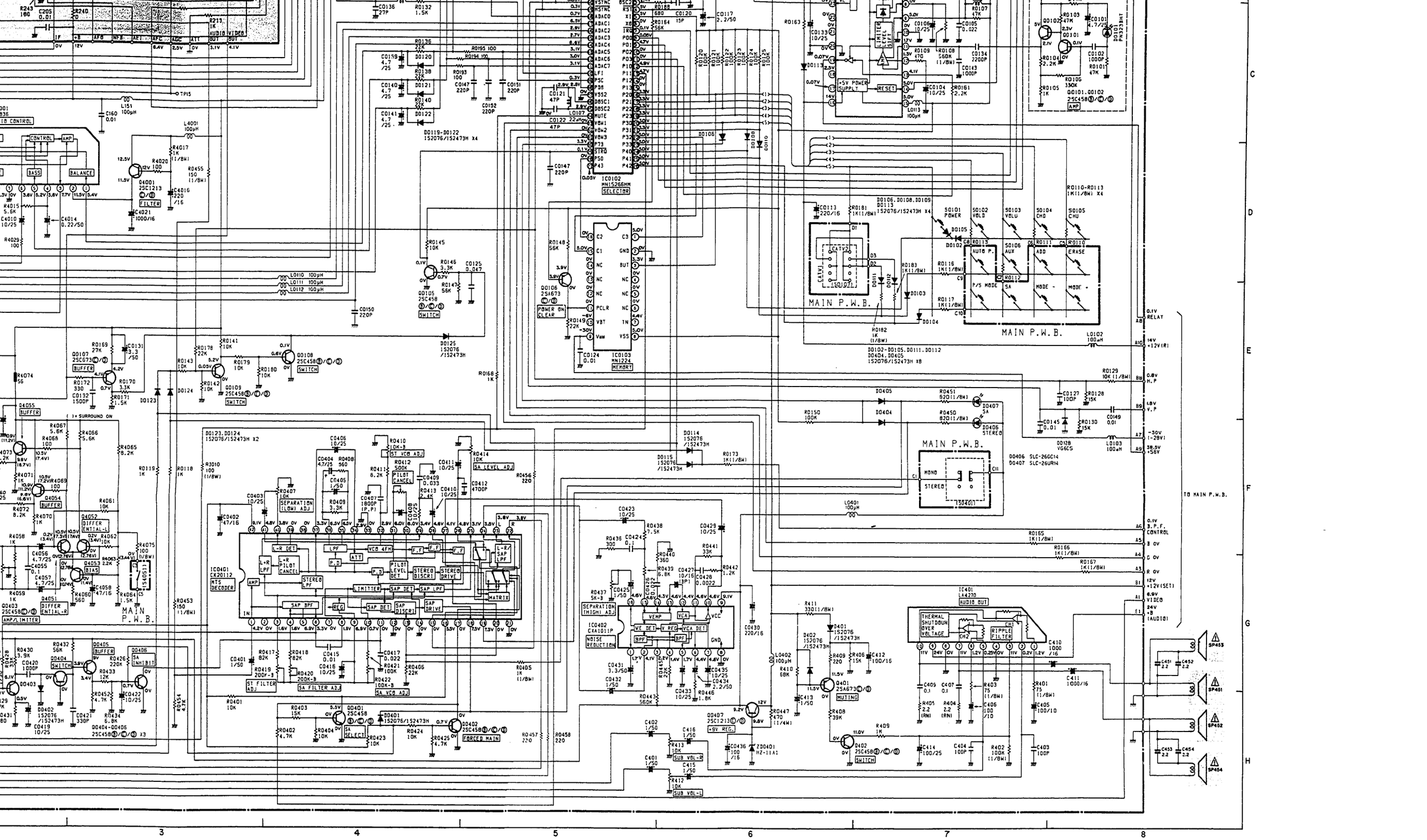


TUNER STEREO CIRCUIT DIAGRAM

F7-3252A/C



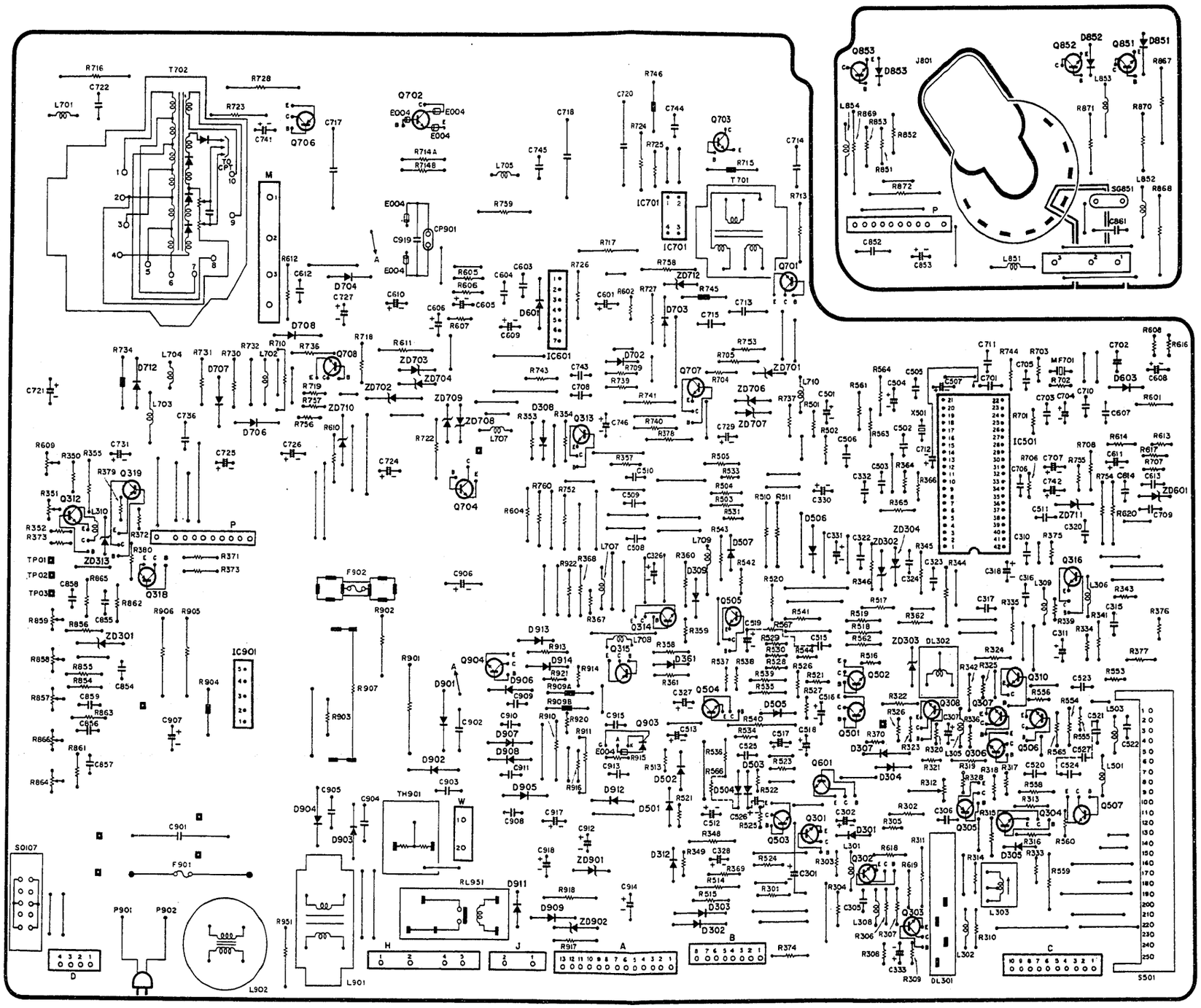

IC4001 AN5836 AUDIO CONTROL
AMP
CONTROL
VOL
TRE
BASS
BALANCE
Q151 2SD789 +5V REG.
Q4001 2SC1213 FILTER
IC0102 MN15266HM SELECTOR
IC0103 MN1224 MEMORY
Q0106 2SA673 POWER ON CLEAR
Q0105 2SC458 SWITCH
+5V POWER SUPPLY
RESET
MAIN P.W.B.
*6 MAIN P.W.B.
PICTURE
COLOR
TINT
BLACK LEVEL
Q3001.Q4002.Q4003 2SC1213 BUFFER
Q0107 2SC673 BUFFER
Q0108 2SC458 SWITCH
Q0109 2SC458 SWITCH
Q4055 BUFFER
( ) = SURROUND ON
TV VIDEO OUT
TV AUDIO OUT R
TV AUDIO OUT L
AUDIO IN
R
L/MONO
VIDEO IN
IC3001 MA1150B A/V SW
SW
SW/AMP
Q4003
Q4002
Q4054 BUFFER
Q4052 DIFFERENTIAL-L
Q4059 BIAS
Q4051 DIFFERENTIAL-R
Q0403 AMP/LIMITER
Q0405 BUFFER
Q0406 SA INHIBIT
Q0404 SWITCH
Q0403
D0402 1S2076 /1S2473H
D0123.D0124 1S2076/1S2473H X2
IC0401 CX20112 MTS DECODER
L-R DET
L+R PILOT CANCEL
STEREO LPF
LPF
VCO 4FH
ATT
P.D
PILOT LEVEL DET
STEREO DISCRI
STEREO DRIVE
F.F
L-R/SAP LPF
LIMITTER
SAP DET
SAP LPF
SAP BPF
REG
SAP DISCRI
SAP DRIVE
MATRIX
ST FILTER ADJ
SA FILTER ADJ
ST VCO ADJ
SA VCO ADJ
PILOT CANCEL
SEPARATION (LOW) ADJ
SA LEVEL ADJ
Q0401 2SC458 SA SELECT
Q0402 2SC458 FORCED MAIN
IC0402 CXA1013P NOISE REDUCTION
SEPARATION (HIGH) ADJ
VEMP
VCA
VE DET
V REG
VCA DET
BPF
GND
Q0407 2SC1213 +9V REG.
ZD0401 HZ-11A1
Q0401 2SA673 MUTING
Q0402 2SC458 SWITCH
SUB VOL-R
SUB VOL-L
ZD3001 HZ-12
ZD0151 HZ-5C1
D0119-D0122 1S2076/1S2473H X4
D0125 1S2076 /1S2473H
D0114 1S2076 /1S2473H
D0115 1S2076 /1S2473H
D0106
D0108
D0110
D0111
D0112
D0113
D0405
D0404
CATV1
CATV2
CATV3
1SQ1071
TP15
TP12


IC0102 MN15266HM SELECTOR
IC0103 MN1224 MEMORY
IC0401 CX20112 NTS DECODER
IC0402 CXA1011P NOISE REDUCTION
IC401 LA4270 AUDIO OUT
MAIN P.W.B.
SURROUND ON
SEPARATION (LOW) ADJ
SEPARATION (HIGH) ADJ
ST VCO ADJ
ST FILTER ADJ
SA LEVEL ADJ
SA FILTER ADJ
SA VCO ADJ
SUB VOL-R
SUB VOL-L
MUTING
+5V REG.
+5V POWER SUPPLY
RESET
AUTO P.
ADD
ERASE
P/S MODE
SA
MODE -
MODE +
TO MAIN P.W.B.

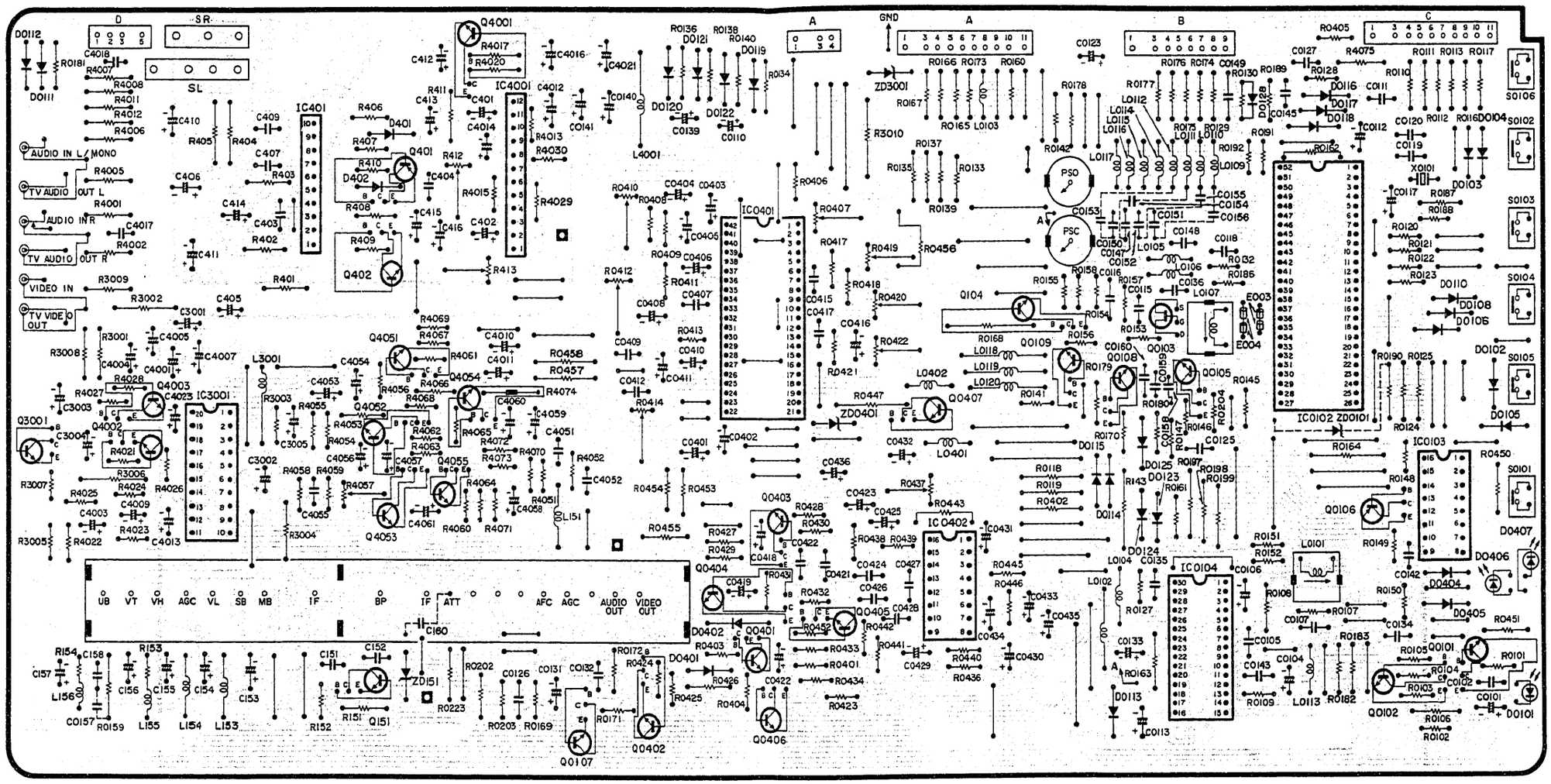
PRINTED WIRING BOARD

MAIN P.W. BOARD

CPT P.W. BOARD



TUNER STEREO P.W. BOARD



REPLACEMENT PARTS LIST

PRODUCT SAFETY NOTE: Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

ABBREVIATIONS: Capacitors . . . . . CD: Ceramic disk, PF: Polyester film, EL: Electrolytic, PP: Polypropylene, PR: Paper, TA: Tantalum
Resistors . . . . . CF: Carbon film, CC: Carbon composition, OMF: Metal oxide film, VR: Variable resistor, WW: Wire wound, FR: Fuse resistor, MG: Metal glaze

SYMBOL NO.	PARTS NO.	DESCRIPTION
		MAIN P.W.B
C301	0253050	EL 100MF 16V
C302	0253032	EL 1MF 50V
C305	0248672	CD 33PF +-5% 50V
C306	0277013	PF 0.01MF +-10% 50V
C307	0253047	EL 22MF 16V
C310	0277013	PF 0.01MF +-10% 50V
C311	0253050	EL 100MF 16V
C315	0277025	PF 0.1MF +-10% 50V
C316	0248688	CD 150PF +-5% 50V
C317	0277017	PF 0.22MF +-10% 50V
C318	0253079	EL 0.22MF 50V
C320	0244139	CD 1000PF +-20% 50V
C322	0248668	CD 22PF +-5% 50V
C323	0248668	CD 22PF +-5% 50V
C324	0248668	CD 22PF +-5% 50V
C326	0253046	EL 10MF 16V
C327	0253082	EL 1MF 50V
C328	0253082	EL 1MF 50V
C330	0253054	EL 1000MF 16V
C331	0253082	EL 1MF 50V
C332	0277025	PF 0.1MF +-10% 50V
C333	0253046	EL 10MF 16V
C501	0253083	EL 2.2MF 50V
C502	0244171	CD 0.01MF +80-20% 50V
C503	0246703	
C504	0253081	EL 0.47MF 50V
C505	0244139	CD 1000PF +-10% 50V
C506	0277013	PF 0.01MF +-10% 50V
C507	0253081	EL 0.47MF 50V
C508	0248678	CD 56PF +-5% 50V
C509	0248678	CD 56PF +-5% 50V
C510	0248678	CD 56PF +-5% 50V
C511	0277013	PF 0.01MF +-10% 50V
C512	0253082	EL 1MF 50V
C513	0253082	EL 1MF 50V
C515	0277013	PF 0.01MF +-10% 50V
C516	0253046	EL 10MF 16V
C517	0253066	EL 10MF 16V
C518	0253049	EL 47MF 16V
C519	0253047	EL 22MF 16V
C520	0248688	CD 150PF +-5% 50V
C521	0248640	CD 10PF +-0.25PF 50V
C522	0248688	CD 150PF +-5% 50V
C523	0277013	PF 0.01MF +-10% 50V
C524	0248686	CD 120PF +-5% 50V
C525	0244118	CD 470PF +-10% 50V
C526	0253050	EL 100MF 16V
C527	0248678	CD 56PF +-5% 50V
C601	0253090	EL 100MF 50V
C603	0244115	CD 560PF +-10% 50V
C604	0277013	PF 0.01MF +-10% 50V
C605	0253083	EL 2.2MF 50V
C606	0253081	EL 0.47MF 50V
C607	0274751	PF 1000PF +-10% 50V
C608	0292716	TA 1MF +-10% 20V
C609	0253082	EL 1MF 50V
C610	0253054	EL 1000MF 16V
C611	0253047	EL 22MF 16V
C612	0277025	PF 0.1MF +-10% 50V
C613	0277013	PF 0.01MF +-10% 50V
C614	0277025	PF 0.1MF +-10% 50V
C701	0244139	CD 1000PF +-20% 50V
C702	0253049	EL 47MF 16V
C703	0277019	PF 0.033MF +-10% 50V
C704	0253082	EL 1MF 50V
C705	0244103	CD 1500PF +-10% 50V
C706	0244103	CD 1500PF +-10% 50V
C707	0253082	EL 1MF 50V
C708	0277013	PF 0.01MF +-10% 50V
C709	0244105	CD 2200PF +-10% 50V
C710	0277015	PF 0.015MF +-10% 50V
C711	0277017	PF 0.022MF +-10% 50V
⚠C712	0253082	EL 1MF 50V
C713	0244507	CD 3300PF +-10% 50V
C714	0244509	CD 4700PF +-10% 50V
C715	0277029	PF 0.22MF +-10% 50V
⚠C717	0299731	PF 5600PF +-5% 1600V
⚠C718	0299932	PF 0.33MF +-10% 200V
⚠C720	0299932	PF 0.33MF +-10% 200V
C721	0259151	EL 100MF 160V
C722	0277013	PF 0.01MF +-10% 50V
C724	0253049	EL 47MF 16V
C725	0253073	EL 470MF 25V
C726	0253093	EL 470MF 50V
C727	0253290	EL 100MF 100V
C729	0253050	EL 100MF 16V
C731	0259842	EL 4.7MF 250V
C736	0277025	PF 0.1MF +-10% 50V
C741	0253049	EL 47MF 16V
C742	0253046	EL 10MF 16V
C743	0244118	CD 470PF +-10% 50V
C744	0277013	PF 0.01MF +-10% 50V

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SYMBOL NO.	PARTS NO.	DESCRIPTION
C745	0243507	CD 330PF +-10% 500V
C746	0253053	EL 470MF 16V
C852	0244511	CD 0.01MF +-10% 500V
C853	0253468	
C854	0244105	CD 2200PF +-10% 50V
C855	0244103	CD 1500PF +-10% 50V
C856	0244105	CD 2200PF +-10% 50V
C857	0244103	CD 1500PF +-10% 50V
C858	0244103	CD 1500PF +-10% 50V
C859	0244102	CD 1200PF +-10% 50V
C861	0244215	CD 2200PF +-10% 2000V
⚠C901	0279718	MF
⚠C902	0249145	CD 4700PF
⚠C903	0249145	CD 4700PF
⚠C904	0249145	CD 4700PF
⚠C905	0249145	CD 4700PF
C906	0259976	EL 470MF 200V
C907	0253457	EL 22MF 160V
⚠C908	0244109	CD 4700PF +-10% 50V
⚠C909	0244109	CD 4700PF +-10% 50V
⚠C910	0244109	CD 4700PF +-10% 50V
⚠C911	0244109	CD 4700PF +-10% 50V
C912	0253051	EL 220MF 16V
C913	0277021	PF 0.047MF +-10% 50V
C914	0258603	EL 3300MF 35V
C915	0277025	PF 0.1MF +-10% 50V
C917	0252967	EL 470MF 25V
C918	0253088	EL 33MF 50V
⚠C919	0249145	CD 4700PF
R301	0187059	CF 560 OHM +-5% 1/16W
R302	0187065	CF 1K OHM +-5% 1/16W
R303	0187070	CF 1.6K OHM +-5% 1/16W
R304	0187069	CF 1.5K OHM +-5% 1/16W
R305	0187049	CF 220 OHM +-5% 1/16W
R306	0100059	CF 560 OHM +-5% 1/8W
R307	0187065	CF 1K OHM +-5% 1/16W
R308	0187059	CF 560 OHM +-5% 1/16W
R309	0187073	CF 2.2K OHM +-5% 1/16W
R310	0100050	CF 240 OHM +-5% 1/8W
R311	0113731	CF 180 OHM +-5% 1/16W
R312	0150034	VR 500 OHM-B
R313	0187051	CF 270 OHM +-5% 1/16W
R314	0187065	CF 1K OHM +-5% 1/16W
R315	0187061	CF 680 OHM +-5% 1/16W
R316	0187049	CF 220 OHM +-5% 1/16W
R317	0187069	CF 1.5K OHM +-5% 1/16W
R318	0187049	CF 220 OHM +-5% 1/16W
R319	0187039	CF 82 OHM +-5% 1/16W
R320	0187113	CF 100K OHM +-5% 1/16W
R321	0187049	CF 220 OHM +-5% 1/16W
R322	0187085	CF 6.8K OHM +-5% 1/16W
R323	0187069	CF 1.5K OHM +-5% 1/16W
R324	0187061	CF 680 OHM +-5% 1/16W
R325	0187065	CF 1K OHM +-5% 1/16W
R326	0187089	CF 10K OHM +-5% 1/16W
R328	0187033	CF 5.6K OHM +-5% 1/16W
R333	0187077	CF 3.3K OHM +-5% 1/16W
R334	0187065	CF 1K OHM +-5% 1/16W
R335	0187059	CF 560 OHM +-5% 1/16W
R336	0187062	CF 750 OHM +-5% 1/16W
R339	0187067	CF 1.2K OHM +-5% 1/16W
R341	0187053	CF 330 OHM +-5% 1/16W
R342	0187065	CF 1K OHM +-5% 1/16W
R343	0187063	CF 820 OHM +-5% 1/16W
R344	0100041	CF 100 OHM +-5% 1/8W
R345	0100041	CF 100 OHM +-5% 1/8W
R346	0100041	CF 100 OHM +-5% 1/8W
R348	0100117	CF 150K OHM +-5% 1/8W
R349	0187091	CF 12K OHM +-5% 1/16W
R350	0187097	CF 22K OHM +-5% 1/16W
R351	0150114	VR 10K OHM-B
R352	0187091	CF 12K OHM +-5% 1/16W
R353	0187077	CF 3.3K OHM +-5% 1/16W
R354	0187073	CF 2.2K OHM +-5% 1/16W
R355	0114149	CF 560 OHM +-5% 1/4W
R357	0187101	CF 33K OHM +-5% 1/16W
R358	0187105	CF 47K OHM +-5% 1/16W
R359	0187081	CF 4.7K OHM +-5% 1/16W
R360	0187081	CF 4.7K OHM +-5% 1/16W
R361	0100115	CF 120K OHM +-5% 1/8W
R362	0100121	CF 220K OHM +-5% 1/8W
R364	0187065	CF 1K OHM +-5% 1/16W
R365	0100049	CF 220 OHM +-5% 1/8W
R366	0187065	CF 1K OHM +-5% 1/16W
R367	0187113	CF 100K OHM +-5% 1/16W
R368	0100065	CF 1K OHM +-5% 1/8W
R369	0187087	CF 8.2K OHM +-5% 1/16W
R370	0187069	CF 1.5K OHM +-5% 1/16W
R371	0187071	CF 1.8K OHM +-5% 1/16W
R372	0187089	CF 10K OHM +-5% 1/16W
R373	0187089	CF 10K OHM +-5% 1/16W
R374	0187059	CF 560 OHM +-5% 1/16W
R375	0187093	CF 15K OHM +-5% 1/16W
R376	0187037	CF 8.2K OHM +-5% 1/16W
R377	0187085	CF 6.8K OHM +-5% 1/16W
R378	0187041	CF 100 OHM +-5% 1/16W
R379	0187089	CF 10K OHM +-5% 1/16W
R380	0187077	CF 3.3K OHM +-5% 1/16W
R501	0187081	CF 4.7K OHM +-5% 1/16W
R502	0187081	CF 4.7K OHM +-5% 1/16W
R503	0100053	CF 330 OHM +-5% 1/8W
R504	0100053	CF 330 OHM +-5% 1/8W
R505	0100053	CF 330 OHM +-5% 1/8W
R510	0100127	CF 390K OHM +-5% 1/8W
R511	0187109	CF 68K OHM +-5% 1/16W
R512	0187091	CF 12K OHM +-5% 1/16W
R513	0187093	CF 15K OHM +-5% 1/16W
R514	0187089	CF 10K OHM +-5% 1/16W

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SYMBOL NO.	PARTS NO.	DESCRIPTION
R515	0187091	CF 12K OHM +-5% 1/16W
R516	0187113	CF 100K OHM +-5% 1/16W
R517	0187085	CF 6.8K OHM +-5% 1/16W
R518	0100040	CF 91 OHM +-5% 1/8W
R519	0100027	CF 27 OHM +-5% 1/8W
R520	0187089	CF 10K OHM +-5% 1/16W
R521	0187075	CF 2.7K OHM +-5% 1/16W
R522	0187107	CF 56K OHM +-5% 1/16W
R523	0187107	CF 56K OHM +-5% 1/16W
R524	0187089	CF 10K OHM +-5% 1/16W
R525	0187089	CF 10K OHM +-5% 1/16W
R526	0187083	CF 5.6K OHM +-5% 1/16W
R527	0187051	CF 270 OHM +-5% 1/16W
R528	0187083	CF 5.6K OHM +-5% 1/16W
R529	0187085	CF 6.8K OHM +-5% 1/16W
R530	0187065	CF 1K OHM +-5% 1/16W
R531	0187041	CF 100 OHM +-5% 1/16W
R533	0187041	CF 100 OHM +-5% 1/16W
R534	0187079	CF 3.9K OHM +-5% 1/16W
R535	0187099	CF 27K OHM +-5% 1/16W
R536	0100117	CF 150K OHM +-5% 1/8W
R537	0187087	CF 8.2K OHM +-5% 1/16W
R538	0187073	CF 2.2K OHM +-5% 1/16W
R539	0187063	CF 820 OHM +-5% 1/16W
R540	0187050	CF 240 OHM +-5% 1/16W
R541	0187073	CF 2.2K OHM +-5% 1/16W
R542	0187063	CF 820 OHM +-5% 1/16W
R543	0187069	CF 1.5K OHM +-5% 1/16W
R544	0187101	CF 33K OHM +-5% 1/16W
R553	0187065	CF 1K OHM +-5% 1/16W
R554	0187107	CF 56K OHM +-5% 1/16W
R555	0187107	CF 56K OHM +-5% 1/16W
R556	0187065	CF 1K OHM +-5% 1/16W
R558	0187101	CF 33K OHM +-5% 1/16W
R559	0187097	CF 22K OHM +-5% 1/16W
R560	0187089	CF 10K OHM +-5% 1/16W
R561	0100133	CF 680K OHM +-5% 1/8W
R562	0187031	CF 39 OHM +-5% 1/16W
R563	0100129	CF 470K OHM +-5% 1/8W
R564	0100129	CF 470K OHM +-5% 1/16W
R565	0187049	CF 220 OHM +-5% 1/16W
R566	0100089	CF 10K OHM +-5% 1/8W
R567	0100089	CF 10K OHM +-5% 1/8W
R601	0187041	CF 100 OHM +-5% 1/16W
R602	0187049	CF 220 OHM +-5% 1/16W
R604	0187065	CF 1K OHM +-5% 1/16W
R605	0187077	CF 3.3K OHM +-5% 1/16W
R606	0187089	CF 10K OHM +-5% 1/16W
R607	0187105	CF 47K OHM +-5% 1/16W
R608	0187089	CF 10K OHM +-5% 1/16W
R609	0150109	VR 200 OHM-B
R610	0187035	CF 56 OHM +-5% 1/16W
R611	0113688	CF 3.3 OHM +-5% 1/2W
R612	0113737	CF 330 OHM +-5% 1/2W
R613	0187045	CF 150 OHM +-5% 1/16W
R614	0100113	CF 100K OHM +-5% 1/8W
R616	0187101	CF 33K OHM +-5% 1/16W
R617	0187059	CF 560 OHM +-5% 1/16W
R618	0187041	CF 100 OHM +-5% 1/16W
R619	0100055	CF 390 OHM +-5% 1/8W
R620	0187111	CF 82K OHM +-5% 1/16W
R701	0187073	CF 2.2K OHM +-5% 1/16W
R702	0187035	CF 56 OHM +-5% 1/16W
R703	0187077	CF 3.3K OHM +-5% 1/16W
R704	0100047	CF 180 OHM +-5% 1/8W
R705	0114163	CF 1.2K OHM +-5% 1/4W
R706	0187081	CF 4.7K OHM +-5% 1/16W
R707	0187049	CF 220 OHM +-5% 1/16W
R708	0100115	CF 120K OHM +-5% 1/8W
R709	0100073	CF 2.2K OHM +-5% 1/8W
R710	0110141	OMF 680 OHM +-5% 1W
R713	0113754	CF 1.5K OHM +-5% 1/2W
⚠ R714A	0119512	MF 1 OHM +-5% 1/4W
⚠ R714B	0119512	MF 1 OHM +-5% 1/4W
R715	0114005	CF 3.3 OHM +-5% 1/4W
R716	0110213	OMF 47 OHM +-5% 2W
⚠ R717	0110241	OMF 680 OHM +-5% 2W
⚠ R718	0100073	CF 2.2K OHM +-5% 1/8W
⚠ R719	0187059	CF 560 OHM +-5% 1/16W
R722	0113731	CF 180 OHM +-5% 1/2W
R723	0100087	CF 8.2K OHM +-5% 1/8W
⚠ R724	0113774	CF 10K OHM +-5% 1/2W
R725	0187075	CF 2.7K OHM +-5% 1/16W
R726	0100075	CF 2.7K OHM +-5% 1/8W
R727	0187047	CF 180 OHM +-5% 1/16W
R728	0119840	MF 0.75 OHM +-5% 1W
⚠ R730	0119512	MF 1 OHM +-5% 1/4W
⚠ R731	0119838	MF 0.5 OHM +-5% 1/4W
⚠ R732	0119512	MF 1 OHM +-5% 1/4W
⚠ R734	0119505	MF 2.2 OHM +-5% 1/4W
R736	0100102	CF 36K OHM +-5% 1/8W
⚠ R737	0187087	CF 8.2K OHM +-5% 1/16W
R739	0187073	CF 2.2K OHM +-5% 1/16W
R740	0100053	CF 330 OHM +-5% 1/8W
⚠ R743	0187047	CF 180 OHM +-5% 1/16W
R744	0187053	CF 330 OHM +-5% 1/16W
⚠ R745	0119503	MF 56 OHM +-5% 1/4W
⚠ R746	0119838	MF 0.5 OHM +-5% 1/4W
R752	0110153	OHF 2.2K OHM +-5% 1W
R753	0100035	CF 56 OHM +-5% 1/8W
R754	0187113	CF 100K OHM +-5% 1/16W
R755	0187051	CF 270 OHM +-5% 1/16W
⚠ R756	0187111	CF 82K OHM +-5% 1/16W
⚠ R757	0187077	CF 3.3K OHM +-5% 1/16W
R758	0110133	OHF 330 OHM +-5% 1W
R759	0114163	CF 1.2K OHM +-5% 1/4W
R760	0100065	CF 1K OHM +-5% 1/8W
R851	0100035	CF 56 OHM +-5% 1/8W
R852	0100035	CF 56 OHM +-5% 1/8W
R853	0100035	CF 56 OHM +-5% 1/8W

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SYMBOL NO.	PARTS NO.	DESCRIPTION
R854	0100065	CF 1K OHM +-5% 1/8W
R855	0100065	CF 1K OHM +-5% 1/8W
R856	0100065	CF 1K OHM +-5% 1/8W
R857	0150112	VR 2K OHM-B
R858	0150112	VR 2K OHM-B
R859	0150112	VR 2K OHM-B
R861	0100039	CF 82 OHM +-5% 1/8W
R862	0100039	CF 82 OHM +-5% 1/8W
R863	0100039	CF 82 OHM +-5% 1/8W
R864	0150109	VR 200 OHM-B
R865	0100041	CF 100 OHM +-5% 1/8W
R866	0150109	VR 200 OHM-B
R867	0110271	OHF 12K OHM +-5% 2W
R868	0110271	OHF 12K OHM +-5% 2W
R869	0110271	OHF 12K OHM +-5% 2W
R870	0113744	CF 560 OHM +-5% 1/2W
R871	0113750	CF 1K OHM +-5% 1/2W
R872	0113756	CF 1.8K OHM +-5% 1/2W
R873	0100071	CF 1.8K OHM +-5% 1/8W
⚠ R901	0141133	WW 2.7 OHM +-10% 7W
⚠ R902	0113778	CF 15K OHM +-5% 1/2W
⚠ R903	0100125	CF 330K OHM +-5% 1/8W
⚠ R904	0119508	MF 56 OHM +-5% 1/4W
⚠ R905	0110197	OMF 10 OHM +-5% 2W
⚠ R906	0110197	OMF 10 OHM +-5% 2W
⚠ R907	0141159	WW 180 OHM +-5% 16W
⚠ R909A	0119512	MF 1 OHM +-5% 1/4W
⚠ R909B	0119512	MF 1 OHM +-5% 1/4W
R910	0110143	OMF 820 OHM +-5% 1W
R911	0110129	OMF 220 OHM +-5% 1W
R913	0114167	CF 1.8K OHM +-5% 1/4W
R914	0187065	CF 1K OHM +-5% 1/16W
R915	0187075	CF 2.7K OHM +-5% 1/16W
R916	0187059	CF 10K OHM +-5% 1/16W
R917	0187095	CF 18K OHM +-5% 1/16W
R918	0114165	CF 1.5K OHM +-5% 1/4W
R920	0187089	CF 10K OHM +-5% 1/16W
R921	0187081	CF 4.7K OHM +-5% 1/16W
R922	0100051	CF 270 OHM +-5% 1/8W
R951	0139015	CC 1M OHM +-20% 1/2W
⚠ IC501	2916631	IC HA11511NT
⚠ IC601	2368501	IC UPC1378H
⚠ IC701	2368913	IC RC 817A
⚠ IC901	2912175	IC STR30135
Q301	2320598	TR 2SC458 B/C/D
Q302	2320598	TR 2SC458 B/C/D
Q303	2320596	TR 2SC458 C/D
Q304	2320598	TR 2SC458 B/C/D
Q305	2321351	TR 2SA836D/E /2SA844D/E
Q306	2320598	TR 2SC458 B/C/D
Q307	2320598	TR 2SC458 B/C/D
Q308	2320596	TR 2SC458 C/D
Q310	2320598	TR 2SC458 B/C/D
Q312	2320598	TR 2SC458 B/C/D
Q313	2320637	TR 2SA673 C/D
Q314	2320598	TR 2SC458 B/C/D
Q315	2320637	TR 2SA673 C/D
Q316	2320598	TR 2SC458 B/C/D
Q318	2320598	TR 2SC458 B/C/D
Q319	2320637	TR 2SA673 C/D
Q501	2320598	TR 2SC458 B/C/D
Q502	2320598	TR 2SC458 B/C/D
Q503	2320598	TR 2SC458 B/C/D
Q504	2320598	TR 2SC458 B/C/D
Q505	2320598	TR 2SC458 B/C/D
Q506	2320598	TR 2SC458 B/C/D
Q507	2320598	TR 2SC458 B/C/D
Q601	2320598	TR 2SC458 B/C/D
⚠ Q701	2326214	TR 2SC3116T
⚠ Q702	2327505	TR 2SD1877
⚠ Q703	2322223	TR 2SC2373 L
Q704	2323434	TR 2SC1983 O/Y
⚠ Q706	2321112	TR 2SA778A
Q707	2320647	TR 2SC1213 C/D
Q707	2323521	TR 2SD789 B/C/D/E
⚠ Q708	2321992	TR 2SC2271 H/N
Q851	2326661	TR 2SC2611/2SC2688
Q852	2326661	TR 2SC2611/2SC2688
Q853	2326661	TR 2SC2611/2SC2688
Q903	2322943	TR CR3CM-8-208
Q904	2320596	TR 2SC458 C/D
D301	2331351	DI 1S2076/1S2473H
D302	2331351	DI 1S2076/1S2473H
D303	2331351	DI 1S2076/1S2473H
D304	2331351	DI 1S2076/1S2473H
D305	2331351	DI 1S2076/1S2473H
D307	2331351	DI 1S2076/1S2473H
D308	2331351	DI 1S2076/1S2473H
D309	2331351	DI 1S2076/1S2473H
D311	2331351	DI 1S2076/1S2473H
D312	2331351	DI 1S2076/1S2473H
D501	2331351	DI 1S2076/1S2473H
D502	2331351	DI 1S2076/1S2473H
D503	2331351	DI 1S2076/1S2473H
D504	2331351	DI 1S2076/1S2473H
D505	2331351	DI 1S2076/1S2473H
D506	2331351	DI 1S2076/1S2473H
D507	2331251	DI 1S2076/1S2473H
D601	2330256	DI V06CS
D602	2330351	DI 1S2076
D603	2330351	DI 1S2076
D702	2330351	DI 1S2076
D703	2331201	DI WC6B
D704	2331201	DI W06B
D706	2334581	DI ES-1A
D707	2338161	DI DFM1A2

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SYMBOL NO.	PARTS NO.	DESCRIPTION
⚠ D708	2338161	DI DFM1A2
D712	2338162	DI DFM1A4
D851	2331351	DI 1S2076/1S2473H
D852	2331351	DI 1S2076/1S2473H
D853	2331351	DI 1S2076/1S2473H
⚠ D901	2331991	DI R02AV
⚠ D902	2331991	DI R02AV
⚠ D903	2331991	DI R02AV
⚠ D904	2331991	DI R02AV
⚠ D905	2330256	DI V06CS
⚠ D906	2330256	DI V06CS
⚠ D907	2330256	DI V06CS
⚠ D908	2330256	DI V06CS
D909	2330256	DI V06CS
D911	2330351	DI 1S2076
D912	2330351	DI 1S2076
D913	2330351	DI 1S2076
D914	2330256	DI V06CS
ZD301	2331154	ZD HZ-12 A/B/C
ZD302	2331827	ZD HZ9-C1
ZD303	2331827	ZD HZ9-C1
ZD304	2331827	ZD HZ9-C1
ZD313	2331154	ZD HZ-12 A/B/C
ZD601	2331797	ZD HZ5 C1
ZD701	2331827	ZD HZ9-C1
⚠ ZD702	2335461	ZD HZ24-2L
⚠ ZD703	2335461	ZD HZ24-2L
⚠ ZD704	2335461	ZD HZ24-2L
ZD706	2331806	ZD HZ-6B3
ZD707	2331785	ZD HZ-4B2
ZD708	2331819	ZD HZ 7C3
ZD709	2331799	ZD HZ-5C3
ZD710	2331155	ZD HZ-12 C
ZD711	2331155	ZD HZ-12 C
ZD712	2331797	ZD HZ5 C1
ZD901	2331155	ZD HZ-12 C
ZD902	2334303	ZD RD30EB2
⚠ TH901	2340511	THERMISTER
DL301	2791101	1H DELAY LINE
DL302	2163296	DELAY LINE
L301	2122956	LAL AXIAL COIL 100UH +-10%
L302	2122949	LAL AXIAL COIL 33UH +-10%
L303	2141148	COIL 1H DELAY
L305	2122953	LAL AXIAL COIL 56UH +-10%
L306	2122956	LAL AXIAL COIL 100UH +-10%
L308	2122953	LAL AXIAL COIL 56UH +-10%
L309	2122948	LAL AXIAL COIL 27UH +-10%
L310	2122934	LAL AXIAL COIL 2.2UH +-10%
L501	2122944	LAL AXIAL COIL 12UH +-10%
L503	2122942	LAL AXIAL COIL 8.2UH +-10%
⚠ L701	2122091	COIL 39UH +-10%
⚠ L702	2122253	LA AXIAL COIL 100UH +-10%
L703	2122253	LA AXIAL COIL 100UH +-10%
L704	2122099	FILTER COIL 18UH +-10%
L705	2272511	HORIZONTAL LENIRITY COIL
L707	2120482	FILTER COIL 100UH +-10%
L708	2120482	FILTER COIL 100UH +-10%
L709	2122253	LA AXIAL COIL 100UH +-10%
L851	2122254	LA AXIAL COIL 120UH +-10%
L852	2122249	LA AXIAL COIL 56UH +-10%
L853	2122249	LA AXIAL COIL 56UH +-10%
L854	2122249	LA AXIAL COIL 56UH +-10%
L901	2271331	LINE FILTER
⚠ L902	2121672	LINE FILTER
⚠ L951	2165221	DEGAUSSING COIL
⚠ T701	2260163	HORIZONTAL TRANSFORMER
⚠ T702	2434654	FBT-C85LI ASS'Y
⚠ T951	2114321	POWER TRANSFORMER
⚠ CF901	2790292	CAPRISTER ME
⚠ MF701	2786683	CERAMIC OSC CSB500F9
⚠ F901	2720587	FUSE 4A WITH WIRE
⚠ F902	2720811	UL FUSE 1A

TUNER STEREO P.W.B

C0101	0253065	EL 4.7MF 25V
C0102	0244139	CD 1000PF +-10% 50V
C0104	0253066	EL 10MF 25V
C0105	0277017	PF 0.022MF +-10% 50V
C0106	0253066	EL 10MF 25V
C0107	0299014	PP 3600PF +-2% 100V
C0110	0253066	EL 10MF 25V
C0111	0277013	PF 0.01MF +-10% 50V
C0112	0253033	EL 470MF 10V
C0113	0253051	EL 220MF 16V
C0115	0277021	PF 0.047MF +-10% 50V
C0116	0277029	PF 0.22MF +-10% 50V
C0117	0253083	EL 2.2MF 50V
C0118	0277013	PF 0.01MF +-10% 50V
C0119	0246444	CD 15PF +-5% 50V
C0120	0246444	CD 15PF +-5% 50V
C0121	0246456	CD 47PF +-5% 50V
C0122	0246456	CD 47PF +-5% 50V
C0123	0253051	EL 220MF 16V
C0124	0277013	PF 0.01MF +-10% 50V
C0125	0277021	PF 0.047MF +-10% 50V
C0126	0277025	PF 0.1MF +-10% 50V
C0127	0248692	CD 220PF +-5% 50V
C0131	0253084	EL 3.3MF 50V
C0132	0244103	CD 1500PF +-10% 50V
C0133	0253066	EL 10MF 25V

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SYMBOL NO.	PARTS NO.	DESCRIPTION
C0134	0244105	CD 2200PF +-10% 50V
C0135	0244139	CD 1000PF +-10% 50V
C0136	0246450	CD 27PF +-5% 50V
C0139	0253065	EL 4.7MF 25V
C0140	0253065	EL 4.7MF 25V
C0141	0253065	EL 4.7MF 25V
C0143	0244139	CD 1000PF +-10% 50V
C0145	0277013	PF 0.01MF +-10% 50V
C0147	0248692	CD 220PF +-5% 50V
C0148	0246420	CD 10PF +-0.25% 50V
C0149	0277013	PF 0.01MF +-10% 50V
C0150	0248692	CD 2200PF +-5% 50V
C0151	0248692	CD 2200PF +-5% 50V
C0152	0248692	CD 2200PF +-5% 50V
C0153	0248692	CD 2200PF +-5% 50V
C0154	0248692	CD 2200PF +-5% 50V
C0155	0248692	CD 2200PF +-5% 50V
C0156	0248692	CD 2200PF +-5% 50V
C0157	0244105	CD 2200PF +-10% 50V
C0158	0248672	CD 33PF +-5% 50V
C0159	0248672	CD 33PF +-5% 50V
C0160	0248672	CD 33PF +-5% 50V
C0401	0253082	EL 1MF 50V
C0402	0253049	EL 47MF 16V
C0403	0253066	EL 10MF 25V
C0404	0253065	EL 4.7MF 25V
C0405	0253082	EL 1MF 50V
C0406	0253066	EL 10MF 25V
C0407	0299007	
C0408	0253066	EL 10MF 25V
C0409	0277019	PF 0.033MF +-10% 50V
C0410	0253066	EL 10MF 25V
C0411	0253066	EL 10MF 25V
C0412	0244109	CD 4700PF +-10% 50V
C0415	0277013	PF 0.01MF +-10% 50V
C0416	0253066	EL 10MF 25V
C0417	0277017	PF 0.022MF +-10% 50V
C0418	0253082	EL 1MF 50V
C0419	0253066	EL 10MF 25V
C0420	0244139	CD 1000PF +-10% 50V
C0421	0248696	CD 330PF +-5% 50V
C0422	0253066	EL 10MF 25V
C0423	0253066	EL 10MF 25V
C0424	0276835	PF 0.1MF +-5% 50V
C0425	0253082	EL 1MF 50V
C0426	0276627	PF 0.022MF +-5% 50V
C0427	0259807	EL 10MF 16V
C0428	0276815	PF 2200PF +-5% 50V
C0429	0253066	EL 10MF 25V
C0430	0253051	EL 220MF 16V
C0431	0253084	EL 3.3MF 50V
C0432	0253082	EL 1MF 50V
C0433	0253066	EL 10MF 25V
C0434	0253083	EL 2.2MF 50V
C0435	0253066	EL 10MF 25V
C0436	0253050	EL 100MF 16V
C151	0277013	PF 0.01MF +-10% 50V
C152	0244105	CD 2200PF +-10% 50V
C153	0253050	EL 100MF 16V
C154	0253082	EL 1MF 50V
C155	0253082	EL 1MF 50V
C156	0253082	EL 1MF 50V
C157	0253082	EL 1MF 50V
C158	0277013	PF 0.01MF +-10% 50V
C3001	0253066	EL 10MF 25V
C3002	0253051	EL 220MF 16V
C3003	0253053	EL 470MF 16V
C3004	0253050	EL 100MF 16V
C3005	0253066	EL 10MF 25V
C4001	0253082	EL 1MF 50V
C4003	0253066	EL 10MF 25V
C4004	0253066	EL 10MF 25V
C4005	0253066	EL 10MF 25V
C4007	0253082	EL 1MF 50V
C4009	0253066	EL 10MF 25V
C401	0253032	EL 1MF 50V
C4010	0253066	EL 10MF 25V
C4011	0253066	EL 10MF 25V
C4012	0253079	EL 0.22MF 50V
C4013	0253082	EL 1MF 50V
C4014	0253079	EL 0.22MF 50V
C4016	0253051	EL 220MF 16V
C4017	0248684	CD 100PF +-5% 50V
C4018	0248684	CD 100PF +-5% 50V
C402	0253082	EL 1MF 50V
C4021	0253054	EL 100MF 16V
C4023	0253082	EL 1MF 50V
C403	0248684	CD 100PF +-5% 50V
C404	0248684	CD 100PF +-5% 50V
C405	0253030	EL 100MF 10V
C4051	0277013	PF 0.01MF +-10% 50V
C4052	0277013	PF 0.01MF +-10% 50V
C4053	0253065	EL 4.7MF 25V
C4054	0253065	EL 4.7MF 25V
C4055	0277025	PF 0.1MF +-10% 50V
C4056	0253065	EL 4.7MF 25V
C4057	0253065	EL 4.7MF 25V
C4058	0253049	EL 47MF 16V
C4059	0253066	EL 10MF 25V
C406	0253030	EL 100MF 10V
C4060	0253066	EL 10MF 25V
C4061	0253054	EL 1000MF 16V
C407	0277025	PF 0.1MF +-10% 50V
C409	0277025	PF 0.1MF +-10% 50V
C410	0253054	EL 1000MF 16V
C411	0253054	EL 1000MF 16V
C412	0253050	EL 100MF 16V
C413	0253082	EL 1MF 50V
C414	0253070	EL 100MF 25V
C415	0253082	EL 1MF 50V

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SYMBOL NO.	PARTS NO.	DESCRIPTION
C416	0253082	EL 1MF 50V
C451	0257048	EL 2.2MF 25V
C452	0257048	EL 2.2MF 25V
C453	0257048	EL 2.2MF 25V
C454	0257048	EL 2.2MF 25V
R0101	0187105	CF 47K OHM +-5% 1/16W
R0102	0187075	CF 4.7K OHM +-5% 1/16W
R0103	0187105	CF 47K OHM +-5% 1/16W
R0104	0187073	CF 2.2K OHM +-5% 1/16W
R0105	0187065	CF 1K OHM +-5% 1/16W
R0106	0100125	CF 330K OHM +-5% 1/8W
R0107	0187105	CF 47K OHM +-5% 1/16W
R0108	0100131	CF 560K OHM +-5% 1/8W
R0109	0187057	CF 470 OHM +-5% 1/16W
R0110	0100065	CF 1K OHM +-5% 1/8W
R0111	0100065	CF 1K OHM +-5% 1/8W
R0112	0100065	CF 1K OHM +-5% 1/8W
R0113	0100065	CF 1K OHM +-5% 1/8W
R0116	0100065	CF 1K OHM +-5% 1/8W
R0117	0100065	CF 1K OHM +-5% 1/8W
R0118	0187065	CF 1K OHM +-5% 1/16W
R0119	0187065	CF 1K OHM +-5% 1/16W
R0120	0187113	CF 100K OHM +-5% 1/16W
R0121	0187113	CF 100K OHM +-5% 1/16W
R0122	0187113	CF 100K OHM +-5% 1/16W
R0123	0187113	CF 100K OHM +-5% 1/16W
R0124	0187113	CF 100K OHM +-5% 1/16W
R0125	0187113	CF 100K OHM +-5% 1/16W
R0127	0187079	CF 3.9K OHM +-5% 1/16W
R0128	0187093	CF 15K OHM +-5% 1/16W
R0129	0100089	CF 10K OHM +-5% 1/16W
R0130	0187093	CF 15K OHM +-5% 1/16W
R0132	0187069	CF 1.5K OHM +-5% 1/16W
R0133	0187097	CF 22K OHM +-5% 1/16W
R0134	0187091	CF 12K OHM +-5% 1/16W
R0135	0187097	CF 22K OHM +-5% 1/16W
R0136	0187097	CF 22K OHM +-5% 1/16W
R0137	0187097	CF 22K OHM +-5% 1/16W
R0138	0187097	CF 22K OHM +-5% 1/16W
R0139	0187097	CF 22K OHM +-5% 1/16W
R0140	0187097	CF 22K OHM +-5% 1/16W
R0141	0187089	CF 10K OHM +-5% 1/16W
R0142	0187089	CF 10K OHM +-5% 1/16W
R0143	0187089	CF 10K OHM +-5% 1/16W
R0145	0187089	CF 10K OHM +-5% 1/16W
R0146	0187077	CF 3.3K OHM +-5% 1/16W
R0147	0187107	CF 56K OHM +-5% 1/16W
R0148	0187107	CF 56K OHM +-5% 1/16W
R0149	0187097	CF 22K OHM +-5% 1/16W
R0150	0187113	CF 100K OHM +-5% 1/16W
R0151	0187089	CF 10K OHM +-5% 1/16W
R0152	0187089	CF 10K OHM +-5% 1/16W
R0153	0187107	CF 56K OHM +-5% 1/16W
R0154	0187085	CF 6.8K OHM +-5% 1/16W
R0155	0187093	CF 15K OHM +-5% 1/16W
R0156	0187077	CF 3.3K OHM +-5% 1/16W
R0157	0187099	CF 27K OHM +-5% 1/16W
R0158	0187057	CF 470 OHM +-5% 1/16W
R0159	0187083	CF 5.6K OHM +-5% 1/16W
R0160	0100061	CF 680 OHM +-5% 1/8W
R0161	0187073	CF 2.2K OHM +-5% 1/16W
R0162	0187107	CF 56K OHM +-5% 1/16W
R0163	0100059	CF 560 OHM +-5% 1/8W
R0164	0187107	CF 56K OHM +-5% 1/16W
R0165	0100065	CF 1K OHM +-5% 1/8W
R0166	0100065	CF 1K OHM +-5% 1/8W
R0167	0100065	CF 1K OHM +-5% 1/8W
R0168	0187065	CF 1K OHM +-5% 1/16W
R0169	0187099	CF 27K OHM +-5% 1/16W
R0170	0187087	CF 8.2K OHM +-5% 1/16W
R0171	0187083	CF 5.6K OHM +-5% 1/16W
R0172	0187053	CF 330 OHM +-5% 1/16W
R0173	0100065	CF 1K OHM +-5% 1/8W
R0174	0100065	CF 1K OHM +-5% 1/8W
R0175	0100065	CF 1K OHM +-5% 1/8W
R0176	0100065	CF 1K OHM +-5% 1/8W
R0177	0100065	CF 1K OHM +-5% 1/8W
R0178	0187097	CF 22K OHM +-5% 1/16W
R0179	0187089	CF 10K OHM +-5% 1/16W
R0180	0187089	CF 10K OHM +-5% 1/16W
R0181	0100065	CF 1K OHM +-5% 1/8W
R0182	0100065	CF 1K OHM +-5% 1/8W
R0183	0100065	CF 1K OHM +-5% 1/8W
R0186	0187077	CF 3.3K OHM +-5% 1/16W
R0187	0100117	CF 150K OHM +-5% 1/8W
R0188	0187061	CF 680 OHM +-5% 1/16W
R0189	0187065	CF 1K OHM +-5% 1/16W
R0190	0187065	CF 1K OHM +-5% 1/16W
R0191	0187041	CF 100 OHM +-5% 1/16W
R0192	0187041	CF 100 OHM +-5% 1/16W
R0197	0187041	CF 100 OHM +-5% 1/16W
R0198	0187041	CF 100 OHM +-5% 1/16W
R0199	0187041	CF 100 OHM +-5% 1/16W
R0202	0187107	CF 56K OHM +-5% 1/16W
R0203	0187109	CF 68K OHM +-5% 1/16W
R0204	0187041	CF 100 OHM +-5% 1/16W
R0223	0187113	CF 100K OHM +-5% 1/16W
R0401	0187089	CF 10K OHM +-5% 1/16W
R0402	0187081	CF 4.7K OHM +-5% 1/16W
R0403	0187093	CF 15K OHM +-5% 1/16W
R0404	0187089	CF 10K OHM +-5% 1/16W
R0405	0100065	CF 1K OHM +-5% 1/8W
R0406	0187097	CF 22K OHM +-5% 1/16W
R0407	0150038	VR 10K OHM-B
R0408	0187059	CF 560 OHM +-5% 1/16W
R0409	0187077	CF 3.3K OHM +-5% 1/16W
R0410	0150024	VR 10K OHM-B
R0411	0187087	CF 8.2K OHM +-5% 1/16W
R0412	0150031	VR 500K OHM-B

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SYMBOL NO.	PARTS NO.	DESCRIPTION
R0413	0187074	CF 2.4K OHM +-5% 1/16W
R0414	0150038	VR 10K OHM-B
R0417	0187111	CF 82K OHM +-5% 1/16W
R0418	0187111	CF 82K OHM +-5% 1/16W
R0419	0150029	VR 200K OHM-B
R0420	0150029	VR 200K OHM-B
R0421	0187113	CF 100K OHM +-5% 1/16W
R0422	0150041	VR 100K OHM-B
R0423	0187089	CF 10K OHM +-5% 1/16W
R0424	0187089	CF 10K OHM +-5% 1/16W
R0425	0187081	CF 4.7K OHM +-5% 1/16W
R0426	0100121	CF 220K OHM +-5% 1/8W
R0427	0187051	CF 270 OHM +-5% 1/16W
R0428	0187101	CF 33K OHM +-5% 1/16W
R0429	0187081	CF 4.7K OHM +-5% 1/16W
R0430	0187079	CF 3.9K OHM +-5% 1/16W
R0431	0187061	CF 680 OHM +-5% 1/16W
R0432	0187107	CF 56K OHM +-5% 1/16W
R0433	0187091	CF 12K OHM +-5% 1/16W
R0434	0187085	CF 6.8K OHM +-5% 1/16W
R0436	0187052	CF 300 OHM +-5% 1/16W
R0437	0150037	VR 5K OHM-B
R0438	0187086	CF 7.5K OHM +-5% 1/16W
R0439	0187085	CF 6.8K OHM +-5% 1/16W
R0440	0187054	CF 360 OHM +-5% 1/16W
R0441	0187101	CF 33K OHM +-5% 1/16W
R0442	0187067	CF 1.2K OHM +-5% 1/16W
R0443	0179619	MF 560K OHM +-1% 1/8W
R0445	0187097	CF 22K OHM +-5% 1/16W
R0446	0187071	CF 1.8K OHM +-5% 1/16W
R0447	0114147	CF 470 OHM +-5% 1/4W
R0450	0100063	CF 820 OHM +-5% 1/8W
R0451	0100063	CF 820 OHM +-5% 1/8W
R0452	0187081	CF 4.7K OHM +-5% 1/16W
R0453	0100045	CF 150 OHM +-5% 1/8W
R0454	0187081	CF 4.7K OHM +-5% 1/16W
R0455	0100045	CF 150 OHM +-5% 1/8W
R0456	0187049	CF 220 OHM +-5% 1/16W
R0457	0187049	CF 220 OHM +-5% 1/16W
R0458	0187049	CF 220 OHM +-5% 1/16W
R151	0100065	CF 1K OHM +-5% 1/8W
R152	0187041	CF 100 OHM +-5% 1/16W
R153	0100017	CF 10 OHM +-5% 1/8W
R154	0100017	CF 10 OHM +-5% 1/8W
R3001	0100038	CF 75 OHM +-5% 1/8W
R3002	0100041	CF 100 OHM +-5% 1/8W
R3003	0187065	CF 1K OHM +-5% 1/16W
R3004	0187065	CF 1K OHM +-5% 1/16W
R3005	0187041	CF 100 OHM +-5% 1/16W
R3006	0113725	CF 100 OHM +-5% 1/2W
R3007	0187041	CF 100 OHM +-5% 1/16W
R3008	0100038	CF 75 OHM +-5% 1/8W
R3009	0100113	CF 100K OHM +-5% 1/8W
R3010	0100041	CF 100 OHM +-5% 1/8W
R4001	0100113	CF 100K OHM +-5% 1/8W
R4002	0100065	CF 1K OHM +-5% 1/8W
R4005	0100113	CF 100K OHM +-5% 1/8W
R4006	0100065	CF 1K OHM +-5% 1/8W
R4007	0100113	CF 100K OHM +-5% 1/8W
R4008	0100065	CF 1K OHM +-5% 1/8W
R401	0100038	CF 75 OHM +-5% 1/16W
R4011	0100113	CF 100K OHM +-5% 1/8W
R4012	0100065	CF 1K OHM +-5% 1/8W
R4013	0187083	CF 5.6K OHM +-5% 1/16W
R4015	0187083	CF 5.6K OHM +-5% 1/16W
R4017	0100065	CF 1K OHM +-5% 1/8W
R402	0100113	CF 100K OHM +-5% 1/8W
R4020	0187041	CF 100 OHM +-5% 1/16W
R4021	0187113	CF 100K OHM +-5% 1/16W
R4022	0187113	CF 100K OHM +-5% 1/16W
R4023	0187065	CF 1K OHM +-5% 1/16W
R4024	0187113	CF 100K OHM +-5% 1/16W
R4025	0187113	CF 100K OHM +-5% 1/16W
R4026	0187065	CF 1K OHM +-5% 1/16W
R4027	0187073	CF 2.2K OHM +-5% 1/16W
R4028	0187073	CF 2.2K OHM +-5% 1/16W
R403	0100038	CF 75 OHM +-5% 1/16W
R4029	0187041	CF 100 OHM +-5% 1/16W
R4030	0187041	CF 100 OHM +-5% 1/16W
R404	0119505	MF 2.2 OHM +-5% 1/4W
R405	0119505	MF 2.2 OHM +-5% 1/4W
R4051	0187085	CF 6.8K OHM +-5% 1/16W
R4052	0187085	CF 6.8K OHM +-5% 1/16W
R4053	0187071	CF 1.8K OHM +-5% 1/16W
R4054	0187071	CF 1.8K OHM +-5% 1/16W
R4055	0187073	CF 2.2K OHM +-5% 1/16W
R4056	0187073	CF 2.2K OHM +-5% 1/16W
R4057	0150034	VR 500 OHM-B
R4058	0187065	CF 1K OHM +-5% 1/16W
R4059	0187065	CF 1K OHM +-5% 1/16W
R406	0187093	CF 15K OHM +-5% 1/16W
R4060	0187059	CF 560 OHM +-5% 1/16W
R4061	0187089	CF 10K OHM +-5% 1/16W
R4062	0187089	CF 10K OHM +-5% 1/16W
R4063	0187073	CF 2.2K OHM +-5% 1/16W
R4064	0187069	CF 1.5K OHM +-5% 1/16W
R4065	0187087	CF 8.2K OHM +-5% 1/16W
R4066	0187083	CF 5.6K OHM +-5% 1/16W
R4067	0187083	CF 5.6K OHM +-5% 1/16W
R4068	0187041	CF 100 OHM +-5% 1/16W
R4069	0187041	CF 100 OHM +-5% 1/16W
R407	0187049	CF 220 OHM +-5% 1/16W
R4070	0187065	CF 1K OHM +-5% 1/16W
R4071	0187065	CF 1K OHM +-5% 1/16W
R4072	0187087	CF 8.2K OHM +-5% 1/16W
R4073	0187087	CF 8.2K OHM +-5% 1/16W
R4074	0119508	MF 56 OHM +-5% 1/4W
R4075	0100041	CF 100 OHM +-5% 1/8W
R408	0187103	CF 39K OHM +-5% 1/16W
R409	0187065	CF 1K OHM +-5% 1/16W

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SYMBOL NO.	PARTS NO.	DESCRIPTION
R410	0187109	CF 68K OHM +-5% 1/16W
R411	0100053	CF 330 OHM +-5% 1/8W
R412	0150038	VR 10K OHM-B
R413	0150038	VR 10K OHM-B
IC0102	2917221	IC MN15266HM
IC0103	2914921	IC MN1224
IC0104	2914961	IC HA11510NT
IC0401	2914931	IC CX20112
IC0402	2914941	IC CXA1011P
IC3001	2914951	IC HA11508
IC4001	2366392	IC AN5836
IC401	2912561	IC LA4270
Q0101	2320598	TR 2SC458 B/C/D
Q0102	2320598	TR 2SC458 B/C/D
Q0103	2324084	FET 2SK105 E/F
Q0104	2320663	TR 2SC1213A C
Q0105	2320598	TR 2SC458 B/C/D
Q0106	2320637	TR 2SA673 C/D
Q0107	2320637	TR 2SA673 C/D
Q0108	2320598	TR 2SC458 B/C/D
Q0109	2320598	TR 2SC458 B/C/D
Q0401	2320598	TR 2SC458 B/C/D
Q0402	2320598	TR 2SC458 B/C/D
Q0403	2320596	TR 2SC458 C/D
Q0404	2320598	TR 2SC458 B/C/D
Q0405	2320598	TR 2SC458 B/C/D
Q0406	2320598	TR 2SC458 B/C/D
Q0407	2320647	TR 2SC1213 C/D
Q151	2323521	TR 2SD789 B/C/D/E
Q3001	2320647	TR 2SC1213 C/D
Q4001	2320647	TR 2SC1213 C/D
Q4002	2320647	TR 2SC1213 C/D
Q4003	2320647	TR 2SC1213 C/D
Q401	2320637	TR 2SA673 C/D
Q402	2320598	TR 2SC458 B/C/D
Q4051	2320598	2SC458 B/C/D
Q4052	2320598	2SC458 B/C/D
Q4053	2320598	2SC458 B/C/D
Q4054	2320598	2SC458 B/C/D
Q4055	2320598	2SC458 B/C/D
D0101	2338171	DI PN3238-HT
D0102	2331351	DI 1S2076/1S2473H
D0103	2331351	DI 1S2076/1S2473H
D0104	2331351	DI 1S2076/1S2473H
D0105	2331351	DI 1S2076/1S2473H
D0106	2331351	DI 1S2076/1S2473H
D108	2331351	DI 1S2076/1S2473H
D0110	2331351	DI 1S2076/1S2473H
D0111	2331351	DI 1S2076/1S2473H
D0113	2331351	DI 1S2076/1S2473H
D0114	2331351	DI 1S2076/1S2473H
D0115	2331351	DI 1S2076/1S2473H
D0116	2331351	DI 1S2076/1S2473H
D0117	2331351	DI 1S2076/1S2473H
D0118	2331351	DI 1S2076/1S2473H
D0119	2331351	DI 1S2076/1S2473H
D0120	2331351	DI 1S2076/1S2473H
D0121	2331351	DI 1S2076/1S2473H
D0122	2331351	DI 1S2076/1S2473H
D0123	2331351	DI 1S3076/1S2473H
D0124	2331351	DI 1S2076/1S2473H
D0125	2331351	DI 1S2076/1S2473H
D0128	2330256	DI V06CS
D0401	2331351	DI 1S2076/1S2473H
D0402	2331351	DI 1S2076/1S2473H
D0404	2331351	DI 1S2076/1S2473H
D0405	2331351	DI 1S2076/1S2473H
D0406	2334672	LED SLC-26
D0407	2334671	LED SLC-26UR14
D401	2331351	DI 1S2076/1S2473H
D402	2331351	DI 1S2076/1S2473H
ZD0401	2331831	
ZD151	2331807	ZD HZ6 C1
ZD3001	2331154	ZD HZ-12 A/B/C
L0101	2161992	LOW FREQUENCY COIL
L0102	2122253	LA AXIAL COIL 150UH +-10%
L0103	2122956	LAL AXIAL COIL 100UH +-10%
L0104	2122253	LA AXIAL COIL 100UH +-10%
L0105	2122937	LAL AXIAL COIL 3.9UH +-10%
L0106	2122949	LAL AXIAL COIL 33UH +-10%
L0107	2164362	COIL 22UH
L0109	2122956	LAL AXIAL COIL 100UH +-10%
L0110	2122956	LAL AXIAL COIL 100UH +-10%
L0111	2122956	LAL AXIAL COIL 100UH +-10%
L0112	2122956	LAL AXIAL COIL 100UH +-10%
L0113	2122956	LAL AXIAL COIL 100UH +-10%
L0114	2122956	LAL AXIAL COIL 100UH +-10%
L0115	2122956	LAL AXIAL COIL 100UH +-10%
L0116	2122956	LAL AXIAL COIL 100UH +-10%
L0117	2122956	LAL AXIAL COIL 100UH +-10%
L0118	2122934	LAL AXIAL COIL 2.2UH +-10%
L0119	2122934	LAL AXIAL COIL 2.2UH +-10%
L0120	2122934	LAL AXIAL COIL 2.2UH +-10%
L0401	2122956	LAL AXIAL COIL 100UH +-10%
L0402	2122253	LA AXIAL COIL 100UH +-10%
L151	2122253	LA AXIAL COIL 100UH +-10%
L153	2122953	LAL AXIAL COIL 56UH +-10%
L154	2122953	LAL AXIAL COIL 56UH +-10%
L155	2122953	LAL AXIAL COIL 56UH +-10%
L156	2122953	LAL AXIAL COIL 56UH +-10%
L3001	2122956	LAL AXIAL COIL 100UH +-10%
L4001	2122253	LA AXIAL COIL 100UH +-10%
L902	2165221	DEGAUSSING COIL

PRODUCT SAFETY NOTE: Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

SYMBOL NO.	PARTS NO.	DESCRIPTION
		MISCELLANEOUS:
	3118443	CABINET ASS'Y (HCPA)
	3460826	BACK COVER ASS'Y (HCPA)
	3727972	HOLDER-AC LINE CORD
	4228418	WASHER
	3785043	PUSH LOCK A
	3739671	BS CORD HOLDER
	4518172	SCREW-4X25MM
	4137976	4X20 TAPPING SCREW WITH WASHER
	4159423	M3X12 SCREW W/WASHER
EC	2663827	10P PLUG PIN
ESL	2661753	PIN PLUG WITH BASE
ESR	2661752	3P PIN PLUG WITH BASE
E003	2771891	FERRITE BEADS CORE 003
E004	2771891	FERRITE BEADS CORE 003
E2002	2687951	VHF ADAPTOR
E2005	2750643	LOOP ANTENNA WITH FEEDER
E3001	2970101	REMOTE CONTROL TRANSMITTER
E3010A	2750661	TELESCOPIC ANTENNA
E372	2771892	FERRITE BEADS CORE 004
⚠E6001	2442432	DEFLECTION YOKE
E801	2786331	CPT SOCKET FOCUS COVER
E802	2659471	INSULATOR FOR FOCUS LEAD
E803	2687791	F-US CHANGE
⚠E901	2742553	AC CORD
⚠E902	2720221	FUSE HOLDER
E903	2787531	MICA PLATE
J801	2950301	CPT SOCKET
N1001	3731081	PURSE LOCK
N1002	3733261	LEAD CLAMP
N2006	3744331	PRESET DRIVER
N3010A	3767111	ANTENNA HOLDER
N3010C	4159423	M3X12 SCREW W/WASHER
N4001	4615461	WEDGE
N6006	3763751	SK BINDER
N601A	4520883	M3X12 SCREW WITH WASHER
N702A	4520883	M3X12 SCREW WITH WASHER
N704A	4520883	M3X12 SCREW WITH WASHER
N705	2786362	CONDENSER COVER
N705A	2771892	FERRITE BEADS CORE 004
N901A	4520883	M3X12 SCREW WITH WASHER
N904	2771892	FERRITE BEADS CORE 004
N905	2771892	FERRITE BEADS CORE 004
SG851	2340037	SPARK GAP
⚠SP451	2412591	SPEAKER 6X12
⚠SP452	2412591	SPEAKER 6X12
⚠SP453	2411911	SPEAKER 50HM
⚠SP454	2411911	SPEAKER 50HM
S0101	2632921	TACTO SWITCH
S0102	2632921	TACTO SWITCH
S0103	2632921	TACTO SWITCH
S0104	2632921	TACTO SWITCH
S0105	2632921	TACTO SWITCH
S0106	2632921	TACTO SWITCH
S0107	2620801	SLIDE SWITCH
S501	2632911	KEY SWITCH WITH VR
⚠U0101	2626942	FRONTEND FZ-1252A
⚠V1	2357701	CPT A51ACG25X (HCPA)
X0101	2787521	CRYSTAL
X501	2790441	CRYSTAL
	3705453	DOOR-VR (B)
⚠RL951	2640336	RELAY

CT2079B

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